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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/480,392	06/07/1995	JOHN C. HARVEY	5634.310	9205

21967 7590 09/03/2002

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EXAMINER

MEHTA, BHAVESH M

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 09/03/2002

33

Please find below and/or attached an Office communication concerning this application or proceeding.

Handwritten signature

Office Action Summary

Application No.
08/480,392

Applicant(s)
Harvey et al.

Examiner
David E. Harvey

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jun 18, 2002
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1035 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-15, 17, 18, 20-22, 30-40, 42, 45, 46, 51-64, 68, 72-74, 82-89, and 93 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-15, 17, 18, 20-22, 30-40, 42, 45, 46, 51-64, 68, 72-74, 82-89, and 93 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirements.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other: _____

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SECTION I:

During the present prosecution, many of the same issues have been raised in different ones of the many copending applications. In at least some cases, these issues appear to have been handled and addressed inconsistently between applications. Thus, the following "list" of positions taken by the examiner/Office in regard to such overlapping issues has been created, and will be maintained by the Office, in an attempt to ensure consistency in the way that these issues are handled between applications in the future.

THE EXAMPLES:

1) In lines 2-8 on page 142 of the amendment filed on 1/28/2002 in application SN 08/470,571, applicant suggests that the examiner has objected to the fact that applicant provided citations showing dual support for the claims with respect to both the 1981 and 1987 disclosures. No such objection has ever been raised by the examiner. To the contrary, the examiner found applicant's citations of dual support to be one of the most helpful aids that applicant has provided to date (i.e. when presented in the form of claim charts).

Having said this, the fact remains that examiner/Office was unquestionably misled by the many statements made by applicant concerning the "consequences" of Section 120 "priority". The reason that these statements misled the examiner/Office seems to be self evident from the statements themselves. For example, in the last 7 lines on page 24 of the Appeal Brief filed in SN 08/113,329 on 9/17/1996, applicant states:

"The case law makes clear that the only inquiry concerning claims filed in a subsequent continuation application pursuant to Section 120 is whether they are adequately supported in under Section 112, first paragraph, in the initial application. If the support exists, the inquiry is at an end."

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And statements made in the remarks section of many amendments in which applicant states:

"The present application claims priority under 35 USC §120 of the following applications.....Consequently, Applicants will demonstrate disclosure only with respect to the '81 case,..."

[e.g. see lines 9-21 on page 000507 of the Appendix in the document mailed on 9/10/01 in SN 08/474,139]

These statements misled the examiner/Office into believing that, as a consequence of Section 120, applicant was permitted to use the disclosure of his 1981 parent application alone, e.g. in place of the instant 1987 disclosure, to fulfill section 112 requirements when addressing/replying to Section 112 rejections. However, the examiner/Office now understands that, because applicant's past 1981 parent disclosure was not incorporated into the instant disclosure, the 1981 specification cannot be relied upon by applicant for showings of section 112 support when addressing/responding to rejections made under Section 112; i.e. all section 112 Support must come from the instant "1987" disclosure alone.

The "*objections*" made by the examiner in 08/470,571 were raised because the examiner perceived a continuation, on the part of the applicant, of the same arguments that misled the examiner/Office in the first place. By raising these "*objections*", the examiner hoped to elicit a response from applicant acknowledging the fact that the instant "1987" disclosure was the only disclosure which could be used to fulfill the requirements of section 112 with respect to the limitations of the currently pending amended claims (the significance of the 1981 disclosure is relegated only to the secondary issue of Section 120 priority). The examiner wanted to be sure that the examiner and applicant were now on the same page concerning this issue. And, on at least one occasion, such an acknowledgment appears to have been provided by applicant [see the last 5 lines on page 141 of the amendment filed on 1/28/2002 in SN 08/470,571].

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2) Applicant does not believe that "common subject matter" is required for "priority" under Section 120. Instead, according to applicant, the only thing that applicant needs to do in order to obtain the earlier 1981 filing date for his pending amended claims is to show that each of his pending amended claims can be given different 1987 and 1981 claim interpretations which allows each claim to be supported, in parallel, by "different subject matter" from the 1981 and 1987 specifications.

"[Section] 120 does not require an applicant to demonstrate that the disclosures relied upon under §120 have anything in common besides their ability to separately comply with §112-1 with respect to the claims for which priority is sought. Accordingly, the Examiner's focus on comparing the support from the two applications for similarity or common subject matter is improper and irrelevant because all applicants are required to do is satisfy §120 is show that each disclosure meets the requirements of §112-1 for a given claim." (emphasis added)

[Page 141 of applicant's response filed on 1/28/2002 in application S.N. 08/470,571]

"Accordingly, the law requires a two part test in which the applicant separately demonstrates § 112 support for each application. In the FOA, the examiner distorts this straightforward test by imposing a third element of the test whereby the § 112 support from each application consists of 'common subject matter.'"

[see the last 10 lines on page 137 of the response filed on 1/28/2002 in SN 08/470,571].

Applicant's position seems to be wrong.

"However, as mentioned earlier, a continuing application is entitled to rely on the earlier filing date of an earlier application only with respect to subject matter common to both applications" (emphasis added)

[In *Transco Products, Inc., v. Performance Contracting, Inc.*, 32 USPQ2d 1077 (**18)]

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“Any claim in a continuation-in-part application that is directed solely to subject matter adequately disclosed under 35 U.S.C. 112 in the parent application is entitled to the filing date of the parent application.”

[In *Transco Products, Inc., v. Performance Contracting, Inc.*, 32 USPQ2d 1077 (**18)]

“Assuming the common inventorship, copendency, and cross-reference required by section 120, that section further requires only that the invention be disclosed in the parent application in such manner as to comply with the first paragraph of section 112 and be the same invention as that disclosed in the later application.” (emphasis added)
[*Kirschner*, 305 F.2d 897 (C.C.PA1962)]

3) In the last 5 lines on page 141 of the response filed on 1/28/2002 in 08/470,571, applicant acknowledged that the 1981 application was not incorporated into the 1987 application. As a consequence, applicant also appears to understand that all Section 112 support must come solely from the “instant” 1987 disclosure if the requirements of section 112 are to be satisfied. If applicant knows such to be true, then it is not understood how applicant can still adopt the following position:

“the [examiner’s] assumption that ‘all limitations of the currently pending claims are necessarily directed to that which is described in the present 1987 disclosure’ is mistaken and wholly unsupported.”¹

[lines 8-10 on page 144 of the amendment filed in 08/470,571 on 1/28/2002].

Namely, if all section 112-1 support for all of the claims’ limitations must

¹ Contrary to applicant’s position, the examiner maintains that a pending claim must necessarily be directed to that which is described in the instant specification. This is not to say that the resulting scope of the pending claim is limited only to that which it must necessarily be directed.

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necessarily come from the instant "1987" disclosure alone (e.g. in light that the disclosure of the 1981 parent was not formally incorporated into the instant 1987 disclosure), then how can a limitation of a claim be directed to (i.e. and obtain required section 112-1 support from) anything but that which is described within the said instant 1987 disclosure? Is applicant suggesting that the pending amended claims are **not** necessarily directed to, do **not** necessarily derive section 112-1 support from, and are **not** necessarily claiming, subject matter that is found in the instant 1987 disclosure?

4) Applicant has alleged that "Teletext decoders" did not "locally generate" the images that they outputted/displayed. According to applicant, Teletext decoders only transferred, to their outputs, displayable image data that was received at their inputs. The examiner rejects such a notion. The following is noted:

a) That, as was exemplified via the discussion provided on page 5 of the appendix that was attached to a 1981 "PETITION FOR RULEMAKING" submitted to the FCC ², it was notoriously well known in the art that transmitted Teletext data *typically* comprised a "series of instructions" which instructed the Teletext decoders on how to "generate" the desired images which were to be outputted/displayed;

b) That conventional Teletext decoders *typically* comprised "character generators"; i.e. such "character generators" would not have been required had the received Teletext data actually comprised displayable image data as alleged by applicant; and

c) That transmitted Teletext data *typically* comprised of ASCII-type codes; i.e. wherein one of ordinary skill in the art would have understood the fact that these ASCII-type codes are not themselves displayable. Specifically, these ASCII-type codes only identified the

² SEE: APPENDIX E and APPENDIX F of the latest Office action in SN 470,571.

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way in which locally stored pixel patterns which were locally retrieved and locally assembled into image frames, e.g. via the “character generators”, in order to locally generate the images that were outputted/displayed.

Clearly, Teletext decoders operated to “*locally generate*” the images that they outputted and displayed! ³

5) Applicant’s 1987 inventions used a “SPAM” transmission packet structure to transmit ancillary information through the TV broadcast networks. By using the “SPAM” packet structure, a transmission scheme was established in which a piece of coherent “information”, e.g. such as a complete “processor instruction”, could be broken down into a plurality of “partial information” segments and communicated through the TV network within/as respective “discrete (packet) signals”. On the receiver side of the 1987 inventions, the partial information from the plurality of discrete signals could be recovered and re-organized back into the original piece of coherent “information (e.g. re-organized back into the single complete processor instruction).

Applicant has alleged the above described “partial information” transmission scheme is a key feature which distinguishes applicant’s alleged 1987 inventions over Teletext “prior art”. Applicant’s allegation is founded on a huge misunderstanding/misrepresentation of the Teletext “prior art”. In fact, via such arguments, it appears that applicant is effectively trying to re-invent the foundation on which the Teletext “prior art”

³ Character data was “always” transmitted in an encoded non-displayable format by “typical” Teletext transmission systems; e.g. the only exception to this “typical” configuration that the examiner is aware of is “typical” Chinese/Japanese ideograph Teletext systems being that there were simply too many Chinese/Japanese characters to encode efficiently. Graphics data, on the other hand, was “typically” encoded such that designated bits of each transmitted graphic code could be mapped by the decoder to regions of the display screen so as to generate the graphics image frame that was to be displayed. Yet, even here, a local graphics generator was still required to convert the graphics codes into displayable pixel data. Such a local graphics generator was conventionally implemented either with dedicated logic circuitry or with a “graphics generator” of the “character generator” variety [SEE: the discussion under the headings “Producing the display” and “Graphics” on page 398 of the article “CEEFAX/ORACLE: reception techniques (part I)” by Money in the 7/1975 issue of “TELEVISION”; and lines 13-21 in column 9 of US Patent #3,982,065].

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was actually built [e.g. see the arguments which begin at the top of page 354 and extend to the bottom of page 356 in the response filed on 1/28/02 in SN 08/470,571].

Specifically, standardized Teletext was based on the recognition that vacant lines occurring during the VBI of TV signal transmissions could be used to transmit/communicate embedded frames/"pages" of character/graphics information along with the TV programming. However, it was instantly recognized that each video line did not have sufficient bandwidth to carry an entire frame/page of the character/graphics data. Therefor, the prior art Teletext systems established Teletext packet structures by which "partial image/information" segments (e.g. such as single "rows" of character and control information) could be communicated via respective discrete packetized signals which were embedded within respective discrete television line intervals. On the receiver side of the Teletext "prior art", the partial information segments from the plurality of discrete packetized signals were recovered and re-organized back into the original frame/pages of character/graphics information in order to "locally generate" a Teletext image for display. But the clear correlation that exists between applicant's "SPAM" transmission scheme and prior art Teletext transmission schemes does not end here!

In addition to the transmission of character/graphic frames/pages, those of ordinary skill in the art quickly recognized that the prior art Teletext transmission schemes could be "extended" so as to carry other kinds of information; e.g. "Telesoftware"(i.e. computer programming), remote control signaling, etc,...

This additional information was carried using the same packetized Teletext structure previously established for the character/graphic image data. For example, Telesoftware was also broken down into "partial information" segments to be carried as "rows" of character-like data within respective Teletext packets of one or more Teletext pages (e.g. depending on the size of the Telesoftware program that was being communicated). On the receiver side, the "partial information" segments of the additional information were then recovered from the transmitted discrete packet signals and were re-organized back into its original form (e.g. the complete "Telesoftware" program was reconstructed from the discrete partial programming segments).

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Given the above, it is still the examiner's position that applicant's 1987 packetized "SPAM" structure represents little more than applicant's own version of a conventional "extended" Teletext system [SEE part "A." under "Section XI" in the Office action mailed 8/27/01 in SN 08/470,571]. And again, for the reasons addressed above, the examiner continues to refute applicant's position that claim recitations directed to "discrete signals" and "partial information" contribute anything to avoiding applied Teletext "prior art"; i.e. applicant's allegations to the contrary represent nothing but "straw men."

6) Applicant points out that term "computer software/programming" has been defined as: "a series of instructions which controls the operation of a computer". Stretching this definition, applicant erroneously suggests that the term "computer software" encompasses: "any series of instructions which controls the operation of a computer". And finally, using this improperly stretched definition, applicant argues that each series of transmitted cuing-type codes which were described in his 1981 parent application *implicitly*⁴ taught the transmission and/or downloading of "computer software" in view that each of these series of codes represented "instructions which controlled the operation of a computer". Applicant's argument is lame. For if one were to accept applicant's argument, then in applicant's new world:

a) a computer mouse and computer keyboard suddenly become generators of "computer software" because they too generate series of instructions which are used to control the operation of a computer;

b) Teletext data itself, when received by a CPU implemented decoder, suddenly becomes "computer software" because it too

⁴ Applicant is reminded that what might be "implied" by the 1981 disclosure is irrelevant to section 112-1 support issues. Section 112 support for a claimed feature is only provided if the claimed feature was actually disclosed; i.e. the feature must at least be "inherent" in the disclosure (not simply "implicit").

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represents series of instructions which are used to instruct a computer as to how to generate an image for display;

c) etc,...

Clearly, applicant's argument twists the definition of "computer software" in a way that is repugnant to its conventional use/meaning in order to obtain a 1981 effective filing date for something that he did not have in his possession, and/or did not disclose, until 1987; e.g. namely, the downloading of computer software.⁵

[note: parts "15)" and "16)" of this section too]

7) While applicant has alleged that his "computer software/programming" recitations should be stretched so as to retroactively find support from things which were not "computer software/programming" ⁶(i.e. a series of cuing-type codes/signals from his 1981 disclosure), applicant also takes the opposite approach by alleging that circuit structures which operated to process signals (i.e. specifically Teletext decoders) are not encompassed by the "signal processor" recitations of his pending amended claims. ⁷ The examiner disagrees. The examiner points out that not only are Teletext decoders "signal processors" in any conventional sense of such terminology, but that Teletext decoders are in fact "signal processors" specifically within the context of applicant's own alleged invention. More to the point, the Teletext decoders of the applied prior art are like "SPAM" decoders of applicant's alleged inventions in that both decoders operated to extract and process packets of encoded information distributed to them, at least "*preferably*", via the VBI of broadcasted and/or cable casted TV

⁵ In the supplemental response filed 5/06/2002 in 08/470,571, applicant now submits a different version of essentially the same argument [see part "P)" in "SECTION I" of the latest Office action mailed in 08/470,571].

⁶ This erroneous *reading* has been used in order to erroneously allege a 1981 "priority" date for current claim recitations which are directed to the 1987 "computer software/programming" features of the instant 1987 CIP specification.

⁷ This erroneous *reading* has been used to try to distinguish which is now claimed over applied "prior art" of record.

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programming; i.e. wherein the packets of encoded information comprised Teletext data packets in the case of prior art Teletext decoders and comprised SPAM data packets in the case of the SPAM decoders of applicants alleged invention.⁸ Being such, applicant's allegation that conventional Teletext decoders should somehow be excluded by the "signal processor" recitations of his pending claims seems to fall under the heading of: "NONSENSE."⁹

8) The examiner maintains that applicant's own "SPAM" transmission system, at least as described in the context of television distribution, constitutes little more than applicant's own version of an "extended Teletext system"¹⁰. However, when Teletext "prior art" has been applied against applicant's claims, applicant has become hostile to the suggestion that there is any correlation between his "SPAM" transmission system and

⁸ In fact, for reasons which will be addressed in more detail below, the examiner maintains that the "SPAM" data packets of applicant's alleged invention represent, for all intents and purposes, little more than applicant's own version of a Teletext system in which the function of its Teletext data packets have been "extended" so as to carry more than just the normal displayable character/graphics code (e.g. "extended" to carry control signals, Telesoftware, etc,...).

⁹ NOTE:

1) that *typical* Teletext decoders sequentially performed steps of signal slicing/separation, serial-to-parallel conversion, signal storage, ASCII code to pixel data translation, etc... all which were recognized as having comprised steps of "signal processing" [the last 16 lines on page 5 of the appendix that is attached to the "PETITION FOR RULEMAKING" which was filed with the FCC on 3/26/1981 by the "United Kingdom Teletext Industry Group" which explicitly indicates Teletext decoders as having performed "signal processing"]; and
2) that such processing was even true in the unusual "ideograph" decoders of applicant's argument [i.e. see the block labeled "Teletext signal processor" in figure 10 of the NHK article "A Teletext System for Ideographs" by Numaguchi et al.].

¹⁰ The term "extended Teletext" is being used here to refer to Teletext systems which have been "extended" so as to carry other types of information beyond the normal/typical coded Teletext character/graphic information. One alleged novel feature of applicant's SPAM packets was its ability to carry and distribute computer software. However, contrary to applicant's allegation, packets of "extended Teletext" systems had long been used to carry and distribute computer software too. In fact, the term "Telesoftware" had been specifically coined so as to refer to the "software" that was carried by "extended Teletext systems. The point being, that SPAM and Teletext data packets are equivalent right down to there recognized ability to carry other forms of information including "Telesoftware".

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conventional Teletext transmission systems.¹¹ Yet, on the other hand, applicant appears to openly believe that the scope of many of his pending amended claims encompasses the "WEATHER STAR" system/receiver technology which, to the extent understood by the examiner, is in fact a Teletext based technology.¹² If applicant's claimed/disclosed "SPAM" systems/receivers encompass Teletext based systems/receivers such as the "WEATHER STAR" system/receiver technology, then how in the world can applicant possibly suggest that "SPAM" and Teletext are not correlated/analogous technologies/arts with respect to the applied prior art? Clearly there is a conflict between the two positions.

9) Applicant and applicant's originally filed 1987 disclosure both seem to have alleged that "digital television signals/programming", of the type that is recited in many of applicant's pending amended claims, was notoriously well known in the art at the time of his alleged invention. The examiner has challenged applicant's apparent allegations and has requested that applicant submit "prior art" to show such to be true. In response to the examiner's requests, applicant has submitted U.S. Patent #3,906,480 to Schwartz et al. as having evidenced the conventional "digital television signal" technology on which his disclosure and amended claims were/are allegedly based [note the last 11 lines on page 97 and lines 3-6 on page 98 of the amendment filed on 6/7/2000 in SN 08/470,571]. The examiner continues to be mystified by this submission. The examiner points out that the cited Schwartz et al. patent describes a computer display system in which a computer was used to generate, albeit digitally, *frames* of vector encoded graphic/character information which were then transferred, via a data bus, to "digital TV monitors" for display thereon. As far as the examiner can tell, the Schwartz et al. disclosure has absolutely nothing to do with the transmission of "digitized TV signals/programming" in any conventional sense of such terminology. Simply trying to figure out how the Schwartz et al. patent might be related to anything that was originally

¹¹ Yet a large portion, if not the majority, of the "prior art" cited by applicant pertains to Teletext.

¹² SEE: the article "Landmark forms cable weather news network" which is already of record.

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disclosed by applicant in his 1987 disclosure, much less trying to figure out how it could have been used to enable that which was originally disclosed by applicant in his 1987 disclosure, represents an insurmountable invitation to experimentation unto itself. If Schwartz et al. has been cited by applicant out of carelessness, then its submission to the Office for required review and consideration represents nothing less than an unnecessary drain on already limited PTO resources. If, on the other hand, Schwartz et al. was cited out of necessity (e.g. if it actually represents the best showing of his "digital television" recitation that applicant is/was aware of), then its very presence in the record only goes to support the examiner's position that which is now claimed by applicant, i.e. via the subsequently introduced "digital television" recitations, is not supported and/or enabled by applicant's originally filed 1987 disclosure.

10) Applicant has made many attempts to have the Zaboklicki reference [DE 2,914,981] removed from consideration. In many responses [e.g. the communication filed 7/13/2000 in 08/470,571], applicant has argued that the applied Zaboklicki reference should be removed from consideration simply because the teachings and descriptions provided by this applied prior art reference differ from teachings and descriptions provided by other non-applied members of its patent family (namely, GB #2,016,874). Such a position is absurd. If Zaboklicki DE 2,914,981 teaches that which applicant now claimed, then the fact that Zaboklicki GB #2,016,874 might not have provided these same teachings (even if true) is irrelevant to the fact that the claims ARE unpatentable over Zaboklicki DE 2,914,981. ¹³

11) Within the originally filed abstract of applicant's 1981 past parent specification (i.e. note S.N. 06/317,510), the term "*programming*" was explicitly defined to mean:

¹³ It is important to note that Zaboklicki [DE 2,914,981] included an extensive "List of References" section which described the operation of the Zaboklicki system element-by-element. This section was absent from Zaboklicki [GB 2,016,874]. This additional description in Zaboklicki [DE 2,914,981] is not trivial in that it goes a long way to understanding the invention which was disclosed in the *applied* Zaboklicki prior art; e.g. namely DE 2,914,981 (not GB 2,016,874).

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“everything transmitted over television or radio intended for communication of entertainment or to instruct or inform”.

[see lines 4-7 in the abstract of US patent #4,694,490]

Today this definition is in conflict with applicant's present needs (e.g. it too refutes applicant's claim to the earlier 1981 priority date ¹⁴). Being such, applicant has argued that this explicitly stated definition should be ignored and given no weight because the “abstract”, as applicant alleges, was not *technically* part of his 1981 written description. The examiner rejects this allegation too. The examiner points out: that the originally filed abstract was certainly part of the originally filed disclosure of applicant's 1981 parent application on which all issues must be considered/based and that the definition of “programming” that was provided by this originally filed abstract is completely consistent with the way that it was used throughout the 1981 disclosure.

12) Applicant seems willing to acknowledge that the “1987 inventions” that are described in the instant 1987 CIP specification are in at least in some ways *enhanced and improved* versions of the 1981 inventions that were described in applicant's past 1981 parent specification.

“In fact, both [the 1981 and 1987] specifications describe the inventions disclosed in the 1981 specification, although the 1987 specification contains many enhancements and improvements.”

[see the last two lines on page 9 of applicant's supplemental response filed 5/6/02 in SN 08/470,571]

¹⁴ The examiner notes that applicant is only entitled to the 1981 priority date for “common subject matter”, i.e. the “same” subject matter that is commonly found in both the present 1987 and the 1981 parent disclosures as originally filed. However, the term “programming” itself does not represent “common subject matter” required for priority because the definition given to it within the present 1987 disclosure is vastly different than the definition given to it via the 1981 parent. Specifically, whenever the “programming” terminology is used in a currently pending claim, section 112-1 demands that it be held to the definition that is explicitly provided via the present 1987 disclosure. This 1987 definition is not entitled to the 1981 priority date in view that the 1981 disclosure explicitly gave the same terminology a different meaning.

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One of the “enhancements and improvements” that was effected via the subsequent filing of instant 1987 CIP specification was a change made to the definition of the word “programming.” Whereas the past 1981 Parent specification defined the terminology as referring to Television and Radio transmissions, the instant 1987 specification “improved and enhanced” the 1981 definition of “programming” to explicitly cover “all forms of electronic transmission” now explicitly including “computer programming”, “broadcast print”, etc,... (e.g. additions to the radio/TV transmission of the past 1981 definition).

“everything that is transmitted over television or radio intended for communication of entertainment or to instruct or inform”;

[“programming” as defined in the past 1981 Parent specification]

“everything that is transmitted electronically to entertain, instruct, or inform including television, radio, broadcast print, computer programming, as well as combined medium programming”.

[“programming” as defined in the instant 1987 CIP specification]

Thus, whereas a potential infringer might have reasonably argued that any claim which derives its required section 112-1 support from the past 1981 specification cannot be fairly read on subject matter outside the Television and Radio transmission arts given the 1981 definition of “programming” (e.g. that these claims cannot be fairly read on computer software/programming transmissions), the wiggle room for such arguments has been effectively eliminated when the identically worded claims derive their required section 112-1 support from the instant 1987 CIP specification instead; i.e. being that the 1987 specification replaces the 1981 definition of “programming” with the new “improved and enhanced” 1987 definition of “programming” which has been expanded to explicitly covers “all forms of

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electronic transmission" including, i.e. explicitly, said "computer programming" transmissions.¹⁵ Thus, the examiner asks:

Why should any applicant be allowed to improve/enhance/redefine the subject matter that is being recited by a given claim using the new subject matter that was added via a subsequently filed CIP specification, e.g. in order to tighten the noose on existing potential infringers and/or to cast a wider net to ensnare new potential infringers, and yet still be entitled to the earlier filing date of a past un-incorporated 1981 Parent specification that did not contain this improved/enhanced/redefined subject matter?
(The short answer to this question is: NOT!)

The point being that applicant had every right to draft a claim based on his past 1981 parent specification which contained the 1981 definition of "programming", and to have taken the position that a fair reading of the 1981 "programming" terminology, e.g. in the context of said past 1981 parent specification, encompassed "computer programming" transmission too; i.e. wherein such an "argument" would have been necessary in view that the 1981 definition of "programming" did not include "computer programming". Instead, applicant elected to draft a new CIP specification which modified the definition of "programming" to explicitly include "computer programming" thereby eliminating any question that the fair

¹⁵ The examiner maintains that the differences in the respective 1981 and 1987 definitions of "programming":

1) represent real differences in the respective "properties" of the different kinds of "signaling" that made up the respective 1987 and 1981 subject matter; and

2) are not simply different statements of "disclosed utilities" as applicant might try to allege in the future.

(e.g. once again, the 1987 SPAM-type signaling subject matter that is necessarily being claimed by the pending claims is explicitly inclusive of "computer software/programming" whereas the 1981 signaling subject matter was not).

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reading of "programming", in the context of the new 1987 CIP, now encompasses "computer programming". Again, the examiner asks:

Why should any applicant be allowed to improve/enhance/redefine the subject matter that is being recited by a given claim using new subject matter that was added via a subsequently filed CIP specification, e.g. in order to tighten the noose on existing potential infringers and/or to cast a wider net to ensnare new potential infringers, and still be entitled to the earlier filing date of a past un-incorporated 1981 Parent specification that did not contain this improved/enhanced/redefined subject matter?

(E.G. Why does applicant believe that his new 1987 definition of "programming" should be entitled to the 1981 filing date of the old 1981 "programming" definition which it replaced?; Why should applicant's "1987 inventions", which have been re-defined by the new 1987 definition of "programming", be entitled to the 1981 filing date of "past 1981 inventions" which were defined by the past 1981 definition of "programming?"; etc,...)

13) In order to try to overcome applied prior art of record, applicant has willfully and repeatedly alleged that the Radio and Television broadcast arts represent non-analogous arts. This position is absurd and wholly unsupportable too. The examiner points out that the Television broadcast art actually evolved from the radio broadcast art because the original radio broadcast networks represented existing entities who had the program distribution resources and expertise that was easily extended and applied to TV programming; e.g. NBC, CBS, ABC all began as Radio distribution networks which evolved, quite "naturally", into Television broadcast networks too [NOTE: the last 5 lines of the first paragraph of the first column on page 811 of the article "Versatile Transmission Video Facilities at NBC New York" by Mausler which states that: "the origins of television broadcasting practice may be found in radio" (a copy of which was provided within SN 08/470,571)]. In fact, the most significant difference

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(i.e. if not the only "real" difference) between Radio and Television distribution networks is the difference in bandwidth of the equipment that is required to handle Radio and Television program distributions. Thus, for example, when Hetrich [Australian #74,619] stated that his disclosed "Netcue" system was applicable to either "a network of radio or television stations", one of ordinary skill in the art would have recognized that this teaching was in fact founded on the underlying understanding that Radio and Television network were in fact analogous arts. Applicant's allegations to the contrary is based on a unrealistically low level of skill in the art.

14) Throughout the prosecution of their patent portfolio, applicant has alleged that the "*simultaneous or sequential presentation*" recitation, as found in many of their pending claims, represents a "key limitation" in overcoming and/or avoiding "prior art" of record [note: lines 2-6 on page 17 of Appendix A in the response filed on 3/19/2001 in SN 08/469,078; and part "4)" under "Section VII" of the Office action mailed 8/27/01 in SN 08/470,571]. The examiner strongly disagrees. Specifically, the examiner points out that the alternative expressions "*simultaneous or sequential*" or "*one of a simultaneous and sequential*" simply encompasses ANY AND ALL of the ways by which two types of information could ever be presented to a given audience. Specifically, any time two types of information are presented to a given audience, they must necessarily be presented to that audience either *simultaneously or sequentially* in time. The phrase "*simultaneous or sequential*" simply covers ALL of the possibilities! Thus, if one can show that a given piece of "prior art" operated to present two types of information to a given audience, then one has in fact inherently shown that the prior art meets the "*simultaneous or sequential presentation*" limitation of applicant's claims; i.e. again, the recitation "*simultaneous or sequential*" simply covers ALL of the way that two types of data could ever be displayed to a single audience!

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15) Applicant has alleged that his past 1981 Parent specification “implicitly” taught the downloading of “computer programming” (i.e. computer *software*).¹⁶

“To the contrary, the 1981 definition [of “programming”] implicitly includes, and the 1987 definition [of “programming”] explicitly includes, computer programming in the definition”.

In an attempt to create support for this erroneous allegation, applicant tries to weave together a tapestry of “engineered” teachings and definitions:

A) Applicant falsely asserts that the past 1981 Parent specification literally used the term “programming” to refer to the “instruction signals” that were communicated through the TV/RADIO networks of its disclosed “1981 inventions”;

B) Applicant notes that the “instruction signals” of the past 1981 specification were described as comprising signals which instructed *preprogrammed* microcomputers to perform given tasks.

C) Applicant cites an outside *Dictionary* definition of the term “program” to show that the term “program” was conventionally used to refer to “computer programming/software”; and

D) Finally, applicant argues that when one combines the above “engineered” teachings from his past 1981 Parent specification together, based on the cited *Dictionary* definition of “program”, one “implicitly” arrives at the cited *Dictionary* definition of “program.”

However, for a variety of reasons, the tapestry which applicant attempts to weave falls apart at the slightest touch:

A) When one actually looks at the way in which the 1981 “programming” terminology was coined and used throughout applicant’s past 1981 Parent

¹⁶ Again, what might be “implied” by the 1981 disclosure is irrelevant to section 112-1 support issues. Section 112 support for a claimed feature is only provided if the claimed feature was actually disclosed; i.e. the feature must at least be “inherent” in the disclosure (not simply “implicit”).

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specification, i.e. the context in which it actually appears, one finds that the 1981 “programming” terminology unquestionably referred to signaling which represented scheduled TV/Radio shows (and not to “computer software” as applicant now wishfully alleges). In this regard, one finds that applicant’s past 1981 Parent specification distinctly distinguished the 1981 “instruct signals” from the 1981 “programming” into which said 1981 “instruct signals” were embedded. Specifically, the past 1981 parent specification leaves absolutely no doubt that said 1981 “instruct and information signals” constituted ancillary/auxiliary signaling that was “associated” with, and embedded within, respective TV/Radio “programming”:

“One method provides a technique whereby a broadcast or cablecast transmission facility can duplicate the operation of a television studio automatically through the use of instructions and information signals embedded in programming either supplied from a remote source or sources or prerecorded” (emphasis added)
[lines 32-37 of column 3]¹⁷

“Signal processor, 71, has means, described above, to identify and separate the instruction and information signals from their associated programming and pass them, along with information identifying the channel source of each signal, externally to code reader, 72.” (emphasis added)
[lines 3-7 of column 11]

“The cable head end facility contains signal strippers, 81, 85, and 89, of which models exist well known in the art, that controller/computer, 73, can instruct to remove signals from the programming as required, and signal generators, 82, 86, and 90, also known in the art, that controller/computer, 73, can instruct to add signals to programming as required”
[lines 36-42 of column 12]

“One particular advantage of these methods for monitoring programming is that, by locating the identifier signals in the audio

¹⁷ Citations have been obtained from US Patent #4,694,490.

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and/or video and/or other parts of the programing that are conventionally recorded by, for example, conventional video recorders, ...”

[lines 25-29 of column 16]

“Methods for Governing or Influencing the Operation of Equipment that is External to Conventional Television and Radio Sets by Passing Instructions and Information Signal that are Embedded in Television and Radio Programing Transmissions to Such External Equipment” (emphasis added)

[Lines 34-38 of column 17]

“Signal processor apparatus have the ability to identify instruction and information signals in one or more inputted television and radio programing transmissions” (emphasis added)

[lines 39-41 of column 17]

“Microcomputer, 205, is preprogrammed to respond in a predetermined fashion to instruction signals embedded in the “Wall Street Week” programing transmission... These [embedded instruction] signals instruct microcomputer, 205, to generate several video graphic overlays...” (emphasis added)

[lines 42-49 of column 19]

“At this point, an instruction signal is generated in the television studio originating the programming and is transmitted in the programming transmission” (emphasis added)

[lines 60-63 of column 19]

Given the above, it still seems ridiculous for applicant to suggest that the term “programming”, e.g. in the context of the past 1981 specification”, referred to “computer software” (or even that it referred to applicant’s 1981 “instruct and instruction signals”).

B) It is also quite clear from applicant’s 1981 past parent specification that the “microcomputers” on the receiver side of the disclosed 1981 inventions were “*preprogrammed*” with the “computer programming/software” which told then *how* to respond to detected “instruct signals” that were embedded

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within received TV/Radio “programming.” More specifically, it seems quite apparent that each of the 1981 “instruct signals” of applicant’s 1981 inventions represented typical cuing-type signals/commands which instructed/triggered “preprogrammed” microcomputers to execute respective portions of preprogrammed software in order to perform predefined task/operation (e.g. the 1981 “instruct signals” told the 1981 microcomputers “to generate the overlay” whereas the pre-loaded 1981 computer programming/software told said 1981 microcomputers “how to generate the overlay that was to be generated”).¹⁸

“Microcomputer, 205, is preprogrammed to respond in a predetermined fashion to instruction signals embedded in the “Wall Street Week” programing transmission.... These [embedded instruction] signals instruct microcomputer, 205, to generate several video graphic overlays...” (emphasis added)

[lines 42-49 of column 19]

Clearly, contrary to applicant’s erroneous allegations, there is no teaching in applicant’s past 1981 specification indicates that applicant’s 1981 “instruct signals” represented “computer software/programming” in any conventional sense of such terminology.

C) The past 1981 parent specification does not offer/provide a signaling mechanism and/or structure which would have been capable of handling the large continuous sequence of data bytes required to push “computer software” through TV and/or Radio networks. Such a signaling mechanism and structure was not provided until “SPAM” packeting was introduced via applicant’s subsequently filed instant 1987 CIP specification. Thus, applicant’s past 1981 parent specification was not enabling of the alleged “computer programming/software” feature (i.e. the alleged “computer programming/software” feature that the past 1981 specification did not even describe/disclose).

¹⁸ This being even more apparent when one reads the teaching of applicant’s past 1981 Parent specification in light of the “enhanced and improved” teachings of applicant’s 1987 CIP specification (i.e. a 1987 specification in which cuing-type signaling was enhanced/improved by the added ability of the 1987 systems to re-program downstream devices via downloaded computer software).

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16) On page 150 of the amendment filed 1/28/2002 in 08/470,571, applicant states:

“The 1981 specification states:

It is the object of this invention to unlock this potential by the development of means and methods which permit programming to communicate with equipment that is external to television receivers and radio receivers, particularly computers and computer peripherals such as printers

1981 Spec., Col. 1, ll.36-41

Thus applicants’ 1981 specification makes it clear that ‘programming’ is not just TV and Radio shows- it can also include instructions, codes, and signals that are communicated to and control e.g., computers and computer peripherals. These instructions, codes, and signals clearly fall within the definition of programming and to find otherwise is to conveniently and purposefully overlook the entire purpose of the invention.” (emphasis added)

The examiner disagrees with applicant’s analysis as to the meaning of the cited excerpt. In reading the 1981 Specification, it seems that “the *entire purpose*”¹⁹ to which applicant alludes was the ability to provide multimedia presentations in which TV or Radio “programming” was be displayed along with another supplemental media presentation; wherein the content of the supplemental media presentation was related to the content TV and Radio “programming” thereby *enhancing* the content of the displayed TV and Radio “programming”. To achieve this goal, ancillary “instruct signals” and/or other ancillary “information signals”

¹⁹ The examiner notes that applicant’s 1981 inventions appear to serve many purposes. Therefor, the examiner does not believe that “the invention” of applicant’s 1981 specification has one “entire purpose” as is now alleged by applicant; i.e. if it does have one “entire purpose”, then it is not clear to the examiner what that “entire purpose” actually is.

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were “associated” with, and “embedded” within, the TV or Radio “programming.” These embedded “instruct and information signals” allowed received TV and Radio *programming* “to communicate” with equipment that was external to the TV and Radio receivers in order to produce the supplemental media presentation. Specifically, the associated “instruct and information signals”, which were embedded within the received Radio or TV “programming”, were themselves transferred to the external equipment thereby causing the external equipment to produce said supplemental media presentations. Being such, it is still crystal clear to the examiner that the 1981 “programming” terminology was used in a conventional sense by the 1981 specification so as to refer to TV and Radio signaling which represented scheduled TV and Radio shows. To suggest otherwise is to conveniently and purposefully ignore the fact that applicant’s 1981 specification clearly distinguished the associated “instruct and information signals” as being separate/distinct entities with respect to the “programming” (i.e. the radio/TV shows) into which these associated “instruct and information signals” were embedded:

“One method provides a technique whereby a broadcast or cablecast transmission facility can duplicate the operation of a television studio automatically through the use of **instructions and information signals embedded in programing** either supplied from a remote source or sources or prerecorded” (emphasis added)

[lines 32-37 of column 3]²⁰

“Signal processor, 71, has means, described above, to **identify and separate the instruction and information signals from their associated programing** and pass them, along with information identifying the channel source of each signal, externally to code reader, 72.” (emphasis added)

[lines 3-7 of column 11]

“The cable head end facility contains signal strippers, 81, 85, and 89, of which models exist well known in the art, that controller/computer, 73, can instruct to **remove signals from the programing** as required, and signal generators, 82, 86, and 90, also known in the art, that controller/computer, 73, can instruct to **add signals to programing as required**” (emphasis added)

[lines 36-42 of column 12]

“One particular advantage of these methods for monitoring programming is that, by locating the **identifier signals in the audio and/or video and/or other parts of the programing** that are conventionally recorded by, for example, conventional video recorders, ...” (emphasis added)

[lines 25-29 of column 16]

“Methods for Governing or Influencing the Operation of Equipment that is External to Conventional Television and Radio Sets by **Passing Instructions and Information Signal that are Embedded in**

²⁰ Citations have been obtained from US Patent #4,694,490.

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Television and Radio Programing Transmissions to Such External Equipment” (emphasis added)
[Lines 34-38 of column 17]

“Signal processor apparatus have the ability to identify instruction and information signals in one or more inputted television and radio programing transmissions” (emphasis added)
[lines 39-41 of column 17]

“Microcomputer, 205, is preprogrammed to respond in a predetermined fashion to instruction signals embedded in the “Wall Street Week” programing transmission....These [embedded instruction] signals instruct microcomputer, 205, to generate several video graphic overlays...” (emphasis added)
[lines 42-49 of column 19]

“At this point, an instruction signal is generated in the television studio originating the programming and is transmitted in the programming transmission” (emphasis added)
[lines 60-63 of column 19]

17) Applicant clearly failed to carry his original 1981 disclosure forward into the instant 1987 disclosure ²¹. Because of this, applicant has forfeited his right to now claim any subject matter that was set forth in the disclosure of his originally filed 1981 parent application, but was not carried forward into the disclosure of his originally filed 1987 parent application ²². Thus, APPLICANT IS CLEARLY WRONG when he alleges that he can secure a 1981 priority date for that which is now claimed by showing “possession” of that which is now claimed via the original disclosure of his 1981 parent application (i.e. NOT for the subject matter that was left behind!). Specifically, not only must applicant show that he possessed the subject

²¹ The examiner notes that applicant failed to incorporate the original disclosure from his 1981 parent application into the original disclosure of his 1987 parent; i.e. the 1981 disclosure was neither formally copied into the 1987 disclosure nor was the 1981 disclosure “incorporated by reference” into the 1987 disclosure. The original 1987 disclosure simply replaced the 1981 disclosure as “THE INSTANT DISCLOSURE” from which all section 112 issues must be analyzed.

²² As evidenced by testimony given in ITC investigation #337-TA-392, even applicant and/or his counsel seemed unsure as to exactly what subject matter from applicant’s 1981 parent (“if any”) made it into applicant’s 1987 disclosure.

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matter that is now claimed with respect to the original 1981 disclosure but, more importantly²³, applicant must first show possession of the same claimed subject matter with respect to the instant 1987 disclosure. Stated another way, to secure priority, applicant must be able to show that he did not forfeit his right to claim the subject matter possessed in his originally filed 1981 parent application by showing, *independently*²⁴, that he possessed this same subject matter via the originally filed disclosure of his present application too (i.e. with 1987 disclosure).

18) Applicant is only entitled to claim subject matter which was set forth within the originally filed 1987 disclosure of his present application in accordance with ALL of the requirements of section 112-1. Specifically, the examiner refutes applicant's allegations that the original disclosure of his 1981 parent application can be used in place of the instant 1987 disclosure to meet one or more of the section 112-1 requirements (namely, to establish "possession" of that which is now claimed). It is only after proper section 112 support (i.e. including "possession") has first been established for the pending claims from the disclosure of the present application (the 1987 disclosure), that there is even a need to consider applicant's 1981 parent application at all. Simply put, if the pending claims are not supported under section 112-1 by applicant's present disclosure as originally filed, then the pending claims themselves fail to comply with the

²³ "More important" in the sense that applicant is prohibited from now claiming anything that is not fully supported in accordance with all of the requirements of section 112-1 by the present disclosure (e.g. the disclosure that was originally filed by applicant in 1987). Specifically, the present claims fall under section 112-1 if they are not fully supported by the present 1987 disclosure even if they were, by some remote chance, fully supported by the disclosure of the earlier 1981 parent.

²⁴ If applicant had formally/properly incorporated the written description from his 1981 parent application into his originally filed 1987 disclosure, then there would be no need for these "independent" showings; i.e. applicant could have established "possession" via the originally filed disclosure of his 1981 application alone. It is only because applicant failed to formally/properly incorporate the written description from his 1981 parent into his originally filed 1987 disclosure, that such "independent" showings of "possession" are needed; i.e. because the actions taken by applicant have in fact caused the forfeiture of his right to now claim that subject matter from his 1981 disclosure which was not carried forward into the 1987 application.

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requirements of section 112-1 and no further questions need be asked²⁵. Again, because applicant failed to formally/properly incorporate his 1981 disclosure into his 1987 disclosure, applicant is prohibited from relying on his 1981 disclosure to supplement his present 1987 disclosure (i.e. at least as far as complying with the requirements of section 112-1 is concerned). Stated another way, because applicant's 1981 parent application was never formally incorporated into applicant's present 1987 disclosure, it does not constitute part of applicant's 1987 disclosure, i.e. the *instant disclosure*, from which all section 112-1 support for the currently pending amended claims must be derived.

19) As was noted above, applicant does not believe that "common subject matter" is a requirement for priority under section 120.

"[Section] 120 does not require an applicant to demonstrate that the disclosures relied upon under §120 have anything in common besides their ability to separately comply with §112-1 with respect to the claims for which priority is sought. Accordingly, the Examiner's focus on comparing the support from the two applications for similarity or common subject matter is improper and irrelevant because all applicants are required to do is satisfy §120 is show that each disclosure meets the requirements of §112-1 for a given claim." (emphasis added)

[Page 141 of applicant's response filed on 1/28/2002 in application S.N. 08/470,571]

"Accordingly, the law requires a two part test in which the applicant separately demonstrates § 112 support for each application. In the FOA, the examiner distorts this straightforward test by imposing a third element of the test whereby the § 112 support from each application consists of 'common subject matter.'"

[see the last 10 lines on page 137 of the response filed on 1/28/2002 in SN 08/470,571].

²⁵ At least with respect to the issue of "adequate written description".

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Being such, applicant does not even pretend that the subject matter that is now being claimed in his many applications represents "common subject matter" between the instant 1987 CIP specification and the past 1981 parent specification. Instead, applicant is happy to allege the benefit of section 120 priority for that which is claimed based only on alleged "correlated subject matter" between his 1987 and 1981 specifications; e.g.

NOTE:

- a) That Appendix C of applicant's response filed 6/7/2000 sets forth alleged "correlations" between respective 1981 and 1987 disclosures; and
- b) That the claim by claim showing of alleged 1981 and 1987 section 112 claim support in Appendix A of applicant's response filed 6/7/2000 seem to regurgitate many of the alleged "correlations".

The examiner, on the other hand, believes that "common subject matter" is in fact a requirement of section 120. Thus, the examiner maintains that applicant's allegations pertaining to the existence of "correlated subject matter" are irrelevant to the issue of section 120 priority because "common subject matter", not "correlated subject matter", is required under section 120.²⁶

An extreme example of just how far applicant has been willing to distort section 120 in an effort to obtain the 1981 priority date for ones of the pending amended claims can be found in the claim chart for claim 123 within APPENDIX A of applicant's response filed 6/7/2000 in SN 08/470,571. In this claim chart, applicant alleges that the recitations of claim 123 find section 112-1 support via the "Super Discount Supermarkets" embodiment of the instant 1987 disclosure while alleging that this claimed 1987 "Super Discount Supermarkets" embodiment is entitled to the 1981 filing date of the parent application based on the 1981 "Wall Street Week" embodiment. The examiner disagrees. Specifically, the examiner maintains that the 1987 "Super Discount Supermarkets" embodiment and the 1981 "Wall Street Week" embodiment do not

²⁶ See part "A)" of "SECTION I" above

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constitute "common subject matter" and therefore the claimed 1987 "Super Discount Supermarkets" embodiment is not entitled to the 1981 filing date of the 1981 "Wall Street Week" embodiment as alleged.

20) In lines 3-7 on page 11 of the supplemental response filed 5/06/2002 in SN 08/470,571, applicant states:

"the starting point for determining whether an applicant is entitled to priority under section 120 is what is being claimed. Without identifying precisely what is being claimed, it is impossible to seriously undertake an analysis of whether sufficient support exists in both applications thus entitling applicants to a 1981 priority date". ²⁷

The examiner was a bit surprised that applicant raised this issue after all of the section 112-1 requests which have been made by the Office throughout the present prosecution in hopes of getting applicant's clarification as to *precisely what it is* that applicant claims. In fact, the Office continues to struggle in its efforts to make such determinations for the 10,000 or so pending amended claims. In the past, when applicant has been asked to identify "*precisely what is being claimed*", applicant has declined ²⁸ to provide such showings instead opting to take the positions:

A) That it is the examiner's job, not applicant's, to read and understand the 557 pages of applicant's current 1987 CIP specification in order to determine "precisely what it is being claimed" via applicant's 10,000 or so pending claims; and

²⁷ The examiner agrees with applicant's position noting that, without being able to identify precisely what it is that is being claimed, it is impossible to seriously undertake many other examining related activities too .

²⁸ A notable exception being the most helpful claim charts of alleged "dual" section 112 support which applicant has, only on a few occasions, been willing to kindly provide [e.g. APPENDIX A in the amendment filed 6/7/2000 in 08/470,571].

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B) That at least some of the limitations of applicant's 10,000 or so pending claims are actually directed to subject matter that is not described within in the instant 1987 CIP specification.

"the [examiner's] assumption that 'all limitations of the currently pending claims are necessarily directed to that which is described in the present 1987 disclosure' is mistaken and wholly unsupported."²⁹

[lines 8-10 on page 144 of the amendment filed in 08/470,571 on 1/28/2002].

Hence applicant does not wish to cite, or indeed is unable to cite, section 112-1 support from the instant CIP disclosure for these limitations [e.g. often times out of an expressed fear that a court, at some later date, might actually hold the scope/meaning of these limitations as being directed to subject matter that was actually disclosed within the instant 1987 CIP specification].

In regard to the section 112-1 issue that has now been raised by applicant, the following positions continue to be taken by the present examiner:

A) It has always been a desire of the Office to determine "precisely what it is" that applicant now claims. Being that it still remains so unclear as to "precisely what it is" that applicant now claims, clarification on the part of applicant is once again formally requested for the 10,000 or so pending claims. For the record, the current examiner has found applicant's claim charts of alleged "dual" section 112-1 support to be the most helpful form of aid that applicant has provided to date because it at least attempts to match each claimed

²⁹ Contrary to applicant's position, the examiner maintains that a pending claim must necessarily be directed to that which is described in the instant 1987 specification. This is not to say that the resulting scope of the pending claim is limited only to that of the 1987 specification to which it must necessarily be directed.

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limitation to the specific teachings in the specification(s) that they are allegedly directed;³⁰ and

B) The examiner continues to adopt the positions expressed by Judge Luckern at the ITC:

1) “that the specification of the ‘277 patent [the 557 pages of the instant 1987 specification] is difficult to understand, as it is dealing with many possible systems”;

2) “that despite complainant’s [i.e. the current applicant’s] attempts to point to the specification of the ‘277 patent [the 557 pages of the instant 1987 specification] as illustrative of some claim elements, said specification has not been helpful in connecting individual claim language to distinct statements in the specification of the ‘277 patent that is supposed to provide an explanation of the claimed systems in issue”;

3) “that complainant’s [i.e. the current applicant’s] assertions in many instances of where support in the specification of the ‘277 patent [the 557 pages of the instant 1987 specification] can be found for claimed elements ‘reads like the directions to a treasure hunt. There’s a piece here, there’s a piece there, it’s in there somewhere.”; and

4) “ that the specification of the ‘277 patent [the 557 pages of the instant 1987 specification] and the claims in issue

³⁰ The process of showing a limitation-to-disclosure match for each limitation of each claim should be an easy task for applicant, if not a trivial one, being that the currently pending claims must be “*clearly anticipated*” by the teachings of applicant’s instant disclosure.

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'are like ships passing in the night in the same ocean, but not necessarily sailing in the same direction.'"
[SEE: 1997 ITC Lexis 307, *258 (part I of II)]

Once again, the examiner hereby requests applicant's help in determining "precisely what it is" that applicant now claims.

21) The examiner notes that the "SPAM" technology, on which the "more sophisticated" systems of applicant's present 1987 disclosure are based, is vastly different from the "cuing-type signal" technology on which the "primitive" systems of applicant's 1981 parent application were based; e.g. the ability of SPAM to carry and distribute "software" being but just one of the more notable differences. Clearly, the "more sophisticated" 1987 alleged inventions that are now *necessarily being claimed* are not entitled to the 1981 filing date of their 1981 "primitive" ancestors; i.e. applicant is not allowed to transport his "more sophisticated" 1987 alleged inventions back in time to the 1981 filing date of his different, albeit sometimes "correlated", "primitive" 1981 alleged inventions.

22) The issues cited above illustrate a further dilemma that the examiners have faced when trying to read and understand that which is now being claimed by applicant. Specifically, terminology which might seem definite when one looks to the instant 1987 disclosure alone, becomes confusing and indefinite when read in light of applicant's responses; responses in which applicant has applied newer 1987 interpretations/definitions to the claims in order to establish section 112-1 support and has applied older and different 1981 interpretations/definitions to the same claims in order to obtain the 1981 priority date for the recitations (this approach is evident throughout appendix A of applicant's last response). Thus, at times, it seems to be the record itself that has, or that has at least contributed to, making the meaning and scope of the claims' recitations so unclear. It must also be noted that the claim recitations themselves are often contorted in the attempt to craft them to read independently on different

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teachings from the two disclosures ³¹. Not only does this process results in claim limitations that are difficult to read in that they do not quite fit teachings from either disclosure, but more importantly, the effort involved in this process is wasted effort because the subject matter being claimed/referenced in the two disclosures is not "common subject matter"; e.g. the claims are not entitled to the 1981 filing date even if it could be shown that they can be read on respective (but different) subject matter from the two disclosure (a situation that is also quite evident from appendix A of applicant's last response).

Even so, given a record in which applicant continues to argue that his pending claims are entitled to the 1981 priority date because they can be read in different ways on the 1981 and 1987 disclosures, a situation is created in which the "broadest reasonable meaning" of a claim's limitations takes on one meaning when defined by the file history itself (e.g. when based on applicant's attempt to read each claims' limitations, improperly, onto two completely different disclosures), and takes on a different meaning when defined, properly, from the originally filed 1987 disclosure by itself. Should the examiner apply the "prior art" according to the interpretations afforded by applicant's 1987 disclosure alone (as is proper), or should the examiner apply the "prior art" according to the interpretations created by applicant via his improper reliance on different subject matter from the different 1981 and 1987 specifications? No matter how you cut it, the result is confusion!

³¹ For example, applicant's claims now recite "downloadable processor instructions" which has no antecedent basis in either of the originally filed 1987 and 1981 disclosures. Yet it appears that this recitation could, quite properly, be read on the originally described "program instruction sets" (e.g. downloaded software) of applicant's instant 1987 disclosure. However, when one looks at appendix A of applicant's last response, one finds that applicant has attempted to read the recitation not on the originally described "program instruction sets" of the instant disclosure, but instead on respective (and different) commands/instructions from the 1981 and 1987 disclosures both of which functioned only to trigger actions/operations on the receiver side. Applicant resorts to this interpretation apparently out of recognition that the "program instruction sets"/software of the instant 1987 disclosure has no equivalent in the 1981 disclosure. What results from this process is a claim which looks like it is literally directed to the downloading of software that was described only in the 1987 disclosure, and yet has been afforded the 1981 effective filing of a parent application in which such a feature was not disclosed (i.e. effectively transporting the 1987 "downloading of software" feature back in time to the 1981 date of the parent application in which it was not disclosed).

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23) The following position taken by Judge Rich demonstrates that “continuity of disclosure”, needed to establish the benefit of priority under section 120, requires continuity of “common subject matter” in a form that meets all of the requirements of section 112-1; e.g. even continuity of “best mode”.

“It must be understood that the introduction of a new best mode disclosure would constitute the injection of ‘new matter’ into the application and automatically deprive the applicant of the benefit of the earlier filing date of the parent or original application for any claim whose validity rests on the new best mode disclosure”.

TRANSCO [38 F.3d 551; 32 U.S.P.Q.2D (BNA) 1077]

24) At times, applicant seems to be of the opinion that *only* the “enablement” requirement of section 112-1 applies to the issue of “continuity”. At other times, applicant seems to be of the opinion that *only* the “description” requirement of section 112-1 applies to the issue of “continuity”. On its face, one of these two positions must be wrong (i.e. they are mutually exclusive). In reality, both positions are wrong. As evidenced above, *ALL* of the requirements under section 112-1 apply to the issue of “continuity” (e.g. even “best mode”). Being such, applicant is only entitled to the benefit of an earlier filing date for claims that are directed to “common subject matter” for which “continuity” has been maintained between the present and the earlier filed application. “Continuity of common subject matter” exists between applications only when there is:

A) Continuity of “written description” between applications for the subject matter being claimed (as defined under section 112-1);

B) Continuity of “enablement” between applications for the subject matter being claimed (as defined under section 112-1); *and*

C) Continuity of “best mode” between applications for the subject matter being claimed (as defined under section 112-1).

[note sections 14 and 15 above]

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Being such, none of applicant's currently pending amended claims are entitled to the priority date of applicant's 1981 parent application in that the claims are not directed to "subject matter" ³² for which there is has been:

- a) the required continuity of "written description" between applications;
- b) the required continuity of "enablement" between applications;
and
- c) the required continuity of "best mode" between applications. ³³

25) It is understood that CIP practice allows an applicant to file a new application containing additional/new subject matter while preserving the applicant's right to claim (and the right to the earlier filing date for) subject

³² The "subject matter" currently being claimed corresponds to the metes and bounds of the pending amended claims as defined by the instant 1987 CIP specification from which they depend. Obviously, for reasons that have been addressed throughout the record, this 1987 "subject matter" currently being claimed is different from the 1981 "subject matter" which would have been claimed had the metes and bound of these same claims been defined by the past 1981 parent specification instead; i.e. evidencing the lack of continuity in "common subject matter" with respect to that which is claimed.

³³ e.g. applicant has argued that he was under no obligation to update his earlier filed disclosure with his "new best mode" when originally filed the present disclosure. The examiner strongly agrees. However, to maintains continuity between applications, applicant was required to at least carry forward the "old best mode" from of his earlier filed application into his originally filed present disclosure. Applicant failed to do this and therefor has not maintained "continuity of disclosure". For example, as was noted in part "13" of this paragraph, the "old best mode" of applicant's 1981 parent application was based exclusively on primitive 1981 cuing technology while the "new best mode" of applicant's present application was based exclusively on the more sophisticated 1987 "SPAM" technology (i.e. extended Teletext technology). In view that the primitive 1981 cuing technology was not carried forward into the present 1987 application, e.g. applicant's new 1987 disclosure literally replaced applicant's earlier filed 1981 disclosure in its entirety, the "old best mode" was in fact left behind (i.e. it had to be!). For this reason alone, the pending amended claims are not entitled to the 1981 priority date of applicant's parent application. Again, the pending amended claims are necessarily directed to the systems/methods of applicant's present 1987 disclosure which is based on the more sophisticated "SPAM" technology". Accepting applicant's claim to a 1981 priority date for these pending amended claims would allow applicant to transport claims which are necessarily directed to the 1987 disclosure/technology back in time to the 1981 date of the earlier disclosure/technology. Using this scheme, applicant would be able to improperly transport his new 1987 "best mode"/technology back in time to the 1981 date of his "old best mode"/technology.

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matter which was previously disclosed in the parent application. But an applicant's right to claim subject matter from the parent application is only preserved for that subject matter of the parent application which has actually been carried forward (e.g. *incorporated*) into the disclosure of the CIP. Any and all subject matter from the parent application that is not carried forward into the disclosure of the CIP cannot be legally claimed within said CIP; i.e. the right to claim subject matter that is left behind is lost/forfeited with respect to said CIP application. To prevent such a loss/forfeiture, it is common for an applicant to draft the disclosure of his CIP application so that it literally incorporates the entire disclosure of the parent application, e.g. either physically or "by reference", thereby literally carrying forward all of the subject matter from the parent application into the CIP application and in doing so:

- A) Preserving applicant's right to claim any/all of the subject matter from the parent within said CIP application; and
- B) Preserving applicant's right to the filing date of the parent application for any/all claims which are directed to the subject matter of the parent application that has been carried forward into the CIP application.

In contrast to the common CIP practice described above, when filing his 1987 CIP disclosure, the present applicant elected to draft an entirely new specification and elected not to formally incorporate the disclosure from his 1981 parent application in its entirety. In fact, when filing his 1987 CIP disclosure, applicant elected to draft the entirely new specification in a way which makes it difficult to impossible to determine if any of the subject matter from his 1981 parent was carried forward into the disclosure of his CIP³⁴. Today, faced with the fact that subject matter which was not carried forward (i.e. *incorporated*) into the present disclosure has been lost/forfeited, applicant takes a leap of faith by suggesting that all of the subject matter from his 1981 parent application somehow/miraculously found its way into the new disclosure of his 1987 CIP. Clearly, this is not

³⁴ For example: the 1987 CIP appears to have injected a "new best mode disclosure" by literally replacing the 1981 inventions with new 1987 inventions which, by itself, refutes all claims of priority to the 1981 filing date.

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true. In fact, when one studies the two disclosures in detail, one actually finds that little to none of the subject matter from the 1981 parent made it into the 1987 CIP disclosure in a form that constitutes "common subject matter". For example, even the subject matter from the two disclosures which looks similar at first glance, is based on vastly different transmission technologies, different scopes/meaning/interpretations, and on a new "best mode" [e.g. note Appendix II of the Office action mailed 8/27/01 in SN 08/470,571]. Being such, it does not appear that any of applicant's currently pending amended claims are entitled to the 1981 date of applicant's parent application.

26) In the past, applicant seems to have suggested that even if one were to find that applicant's 1981 disclosure had not been carried forward into applicant's later filed 1987 disclosure, one/applicant could still rely on said 1981 disclosure to provide an understanding of the later filed 1987 disclosure with respect to issues under section 112. The examiner notes that only "prior art" can be used for such purposes. Therefor applicant's 1981 can only be used to clarify/supplement his 1987 disclosure if it is found to be "prior art" with respect to the 1987 disclosure. But if the 1981 disclosure is "prior art" for applicant's suggested purpose (i.e. for the purpose of understanding the later filed 1987 disclosure), then it must be "prior art" for issues under sections 102 and 103 too. Thus, for applicant to suggest that his 1981 disclosure be used as "prior art" for the purpose of understanding his 1987 disclosure seems to put applicant, at least potentially, on a very slippery slope; i.e. because if applicant's position were ever *legally* accepted, then applicant's 1981 disclosure would *legally* become "prior art" against the 1987 disclosure for sections 102 and 103 issues too.³⁵

³⁵ For the record: applicant's 1981 disclosure does not constitute "prior art" with respect to applicant's 1987 disclosure and therefor cannot serve as "prior art" for any purposes. Thus, applicant's 1981 disclosure cannot be used to supplement ones understanding of applicant's 1987 disclosure, with respect to issues under section 112-1, as seems to have been improperly suggested by applicant in the past. Specifically, with respect to section 112 issues, applicant's 1987 disclosure *stands alone*.

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27) The examiner notes that many of applicant's pending claims recite the following receiving station structures: a) a receiver; b) a signal detector; c) a processor; and d) an output device. Appendix A of the response filed on 6/7/2000 in SN 08/470,571 shows that:

- a) the recited "receiver" refers to nothing more than --a TV tuner--;
- b) the recited "signal detector" refers to nothing more than a decoder 203 which extracts and error corrects embedded information from the VBI of TV programming;
- c) the recited "processor" refers to nothing more than microcomputer 205; and
- d) the recited "output device" refers to nothing more than a "TV monitor".

The examiner maintains that all of these recited structures are found within a conventional CPU/MP/computer implemented Teletext receivers. For example, note:

- a) the TV tuning element (2);
- b) the extracting and decoding circuitry 8 and 11;
- c) the processing element (13); and
- d) the TV monitor/display (6),
of BETTS [GB 1,556,366].

Such further highlights the direct correlations that exists between the "SPAM" distribution system of applicant's alleged invention and the "Teletext" distribution systems of the "prior art". Again, the examiner believes that applicant's "SPAM" is, for all intents and purposes, synonymous with conventional "Extended Teletext" [note part "5)" of this section];

28) Applicant's originally filed instant disclosure clearly taught away from the "interactive" ultimate receiver station configuration which has been claimed during the present prosecution [note claim 56 as presented in the amendment filed 6/7/2000 and 7/13/2000 in 08/470,571]. Namely, as originally described, one of the key advantages that was allegedly offered by applicant's alleged inventions was the fact that the "ultimate receiver stations" produced their respective personalized audio/video presentation "automatically" and without any manual input from the viewer; e.g. whereby

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the complex processing that was involved within the system remained hidden from, and transparent to, the viewer/user; SEE:

A) lines 27-34 on page 11 of applicant's instant disclosure as originally filed;

B) lines 18-20 on page 91 of applicant's instant disclosure as originally filed;

C) lines 13-34 on page 427 of applicant's instant disclosure as originally filed;

D) etc,...

Despite this original teaching, applicant has subsequently attempted to introduce pending amended claims into the record which, according to applicant's own allegation (see the support for claim 56 as was set forth in APPENDIX A of the amendment filed on 6/7/2000 in SN 08/470,571), recite an "interactive" implementation of the originally disclosed non-interactive "ultimate receiver stations". The section 112-1 problem is immediately apparent [also note the arguments set forth in latest Office action of SN 08/470,571].

29) As originally described, it appears that the "ultimate receiver stations" of applicant's alleged invention produced the combined image of applicant's figure 1C by (apparently) additively mixing the images of figures 1A and 1B in their entirety; i.e. this fact seems to explain why the "line" of figure 1A had to be produced "on a background color that is transparent when overlaid on a separate video image" as was described in applicant's originally filed disclosure [see lines 9-14 on page 25 of applicant's instant disclosure]. Despite this original teaching, applicant now attempts to introduce claims which recite a process in which the respective images are now combined in less than their entirety and/or in which one portion of one image is "replaced" by a portion of another. The section 112-1 problem is immediately apparent [note the latest Office action in SN 08/470,571].

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30) In the first two lines under the heading "*a. Independent Claim 56 and Dependent Claims Thereto*" on page 287 of the response filed 1/28/2002 in SN 08/470,571, applicant alleges that the publication date of the applied Gunn et al article was never established by the Office. This allegation is untrue. The following is noted:

a) This Gunn et al. article was originally submitted by applicant for consideration within voluminous IDS citations. However, as with many of these citations, applicant never provided the Office with information regarding the publication date of the article;

b) The Gunn et al. article has been applied by the Office against many of applicant's pending claims, and while applicant never provided the Office with the article's publication date, the Office was able to establish the date in question and notified applicant of it accordingly [note: the PTO- 892 of paper #2 in the present 08/470,571 record; the PTO-892 of paper #20 in SN 08/447,502; etc,...];

c) Again, the publication date for this Gunn et al. article, e.g. an article that was submitted by applicant for consideration against the pending amended claims, is March 26-28 of 1980. This date is, by any standard, valid "prior art" against all of applicant's pending claims.

31) etc,...

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SECTION II: (112-2 REJECTIONS)

A) Claims 51-64, 68, and 72-74 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

1) Applicant continues to excessively inject the “at least” and the “at least one” terminology throughout the pending amended claims. The examiner continues to take the position that such excessive use of the “at least” terminology causes confusion because it imparts an excessive number possible permutations to the limitations which use such phraseology. For example, line 11 of claim 55 includes the following recitation:

“at least a second portion of said at least one signal including video.”

This recitation includes the following very different variation/permutation:

- a) that only a second portion of said one signal, e.g. a portion of the signal itself, includes video;
- b) that the second portion and additional portions of said one signal, e.g. plural portions of the signal itself, include video;
- c) that only a second portion of a plurality of signals which include the one signal, e.g. such as the signal itself, includes video; and
- d) that the second portion and addition portions of the plurality of signals which include the one signal, e.g. a plurality of portions of a plurality of signals, include video.

When many limitations of this type are grouped together to form a claim, the result is utter confusion; e.g. especially when the disclosure /description itself is difficult to process and understand. For obvious reasons, such claim construction leads to, and/or at least complicates, section 112-1 issues as will be addressed more thoroughly in the following section of this Office action. Clarification of the pending amended claims is once again requested given the noted problem/difficulties.

2) In claim 51, line 10, “said second portion ***of said at least one signal***” does not have clear antecedent basis and is indefinite. Clarification is needed.

3) In claim 51, line 18, “said audio” has multiple antecedent basis when referred back to the “audio” recitations of line 3 and line 10. Clarification is needed.

4) In claim 55, line 12, “said signal” is confusing because it is not clear if it refers to the previously recited “at least one signal” or only to the “one signal” of the previously recited “at least one signal.” Similar clarifications are needed throughout the claims (e.g. note claim 53).

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SECTION III: (112-1 REJECTIONS)

A) Claims 3-15, 17, 18, 20-22, 30-40, 42, 45, 46, 51-64, 68, 72-74, 82-89, and 93 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In related ITC investigation No. 337-TA-392, the Administrative Law Judge found:

1) “that the specification of the ‘277 patent [the 557 pages of the instant 1987 disclosure] is difficult to understand, as it is dealing with many possible systems”;

2) “that despite complainant’s [the current applicant’s] attempts to point to the specification of the ‘277 patent [the 557 pages of the instant 1987 disclosure] as illustrative of some claim elements, said specification has not been helpful in connecting individual claim language to distinct statements in the specification of the ‘277 patent that is supposed to provide an explanation of the claimed systems in issue”;

3) “that complainant’s [the current applicant’s] assertions in many instances of where support in the specification of the ‘277 patent [the 557 pages of the instant 1987 disclosure] can be found for claimed elements ‘reads like the directions to a treasure hunt. There’s a piece here, there’s a piece there, it’s in there somewhere.’”; and

4) “ that the specification of the ‘277 patent [the 557 pages of the instant 1987 disclosure] and the claims in issue ‘are like ships passing in the night in the same ocean, but not necessarily sailing in the same direction.’”

[SEE: 1997 ITC Lexis 307, *258 (part I of II)]

The examiner continues to adopt these same positions in regard to the pending amended claims currently at issue. The following represent specific examples of

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such section 112-1 problems for which appropriate clarification by applicant is required:

1) With respect to claim 3, it is not clear where the disclosure as originally filed described:

- a. the recited “programming storage station” of lines 1 and 2;
- b. the recited “storage device” of line 2;
- c. the recited “automatic control unit” of line 3;
- d. the recited “programming requirement signal” of line 5;
- e. the recited step of “storing” the requirement signal that is recited in line 5;
- f. the recited step of “locating” available programming storage space that is recited in lines 6-7;
- g. the recited “first programming” of line 8 that is stored “based on the step of locating an available programming storage space.”

Clarification is needed.

2) With respect to claim 6, it is not clear where the disclosure as originally filed described:

- a. the recited “information” of line 2 that is stored at said “**programming storage station**”;
- b. the recited “information of line 2 that is stored at said “**automatic control unit**” ;
- c. the recited “information of line 2 that is stored at only “**one**” of said “**programming storage station**” and said “**automatic control unit**” ;
- d. The recited step of “comparing” that is recited in lines 2 and 3.

Clarification is needed.

3) With respect to claim 7, it is not clear where the disclosure as originally filed described:

- a. the recited “stored signal” of line 2;
- b. the “processor” of line 2;
- c. the recited “portion” of the stored signal that is inputted to the processor as is recited in line 2;

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- d. the step of "processing" in lines 3 and 4 in which the inputted portion of a stored signal is processed to locate available programming storage space.

Clarification is needed.

4) With respect to claim 8, it is not clear where the disclosure as originally filed described:

- a. the recited "programming storage station" of line 2;
- b. the recited "first programming to be transmitted" of line 5;
- c. the recited "programming requirement signal" of lines 7 and 8;
- d. the recited "transmitter station" of line 7 which "processes" the recited programming requirement signal;
- e. the recited "instruct signal" of line 6 which is effective to effect the recited "transmitter station" of line 7 which "processes" the recited programming requirement signal in order to locate available storage space in which to store the received first programming;
- f. the recited "receiver station" of line 11 which "processes" the recited programming requirement signal;
- g. the recited "instruct signal" of line 6 which is effective to effect the recited "receiver station" of line 11 which "processes" the recited programming requirement signal in order to locate available storage space in which to store the received first programming;
- h. the recited "transmitter" of line 15;
- I. the recited step for "receiving" a transmitter control signal as is recited in line 14;
- j. the recited step of storing the "instruct signal" and the recited "transmitter control signal", *wherein the stored instruct signal is effective to effect the recited "transmitter station" of line 7 which "processes" the recited programming requirement signal in order to locate available storage space in which to store the received first programming;*
- k. the recited step of storing the "instruct signal" and the recited "transmitter control signal", *wherein the stored instruct signal is effective to effect the recited "receiver station" of line 11 which "processes" the recited programming requirement signal in order to locate available storage space in which to store the received first programming.*

Clarification is needed.

5) With respect to claim 9, it is not clear where the disclosure as originally filed described:

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- a. the recited "remote intermediate transmitter station" of line 2;
- b. the recited "origination transmitter~~s~~" of line 4 (emphasis added);
- c. the recited one or more "origination transmitter~~s~~" of line 4 from which the "first programming", the "transmitter control signal", and the first instruct signal are transmitted, *wherein the stored instruct signal is effective to effect the recited "transmitter station" of line 7 which "processes" the recited programming requirement signal in order to locate available storage space in which to store the received first programming;*
- d. the recited one or more "origination transmitter~~s~~" of line 4 from which the "first programming", the "transmitter control signal", and the first instruct signal are transmitted, *wherein the stored instruct signal is effective to effect the recited "receiver station" of line 11 which "processes" the recited programming requirement signal in order to locate available storage space in which to store the received first programming.*

Clarification is needed.

6) With respect to claim 10, it is not clear where the disclosure as originally filed described:

- a. the "program" of line 2;
- b. the recited "first programming" of lines 1 and 2 which includes "only some of" the "program" of line 2;
- c. the "second programming" of line 3 which is operative to enable the *transmitter station* to complete said program;
- d. the "second programming" of line 3 which is operative to enable the *receiver station* to complete said program;

Clarification is needed.

7) With respect to claim 12, it is not clear where the disclosure as originally filed described:

- a. the "computer program" of line 2, wherein the recited "first programming" of claim 10 includes "only some of" said "computer program" and the "second programming" of claim 10 is operative to enable the *transmitter station* to complete said "computer program; and
- b. the "computer program" of line 2, wherein the recited "first programming" of claim 10 includes "only some of" said "computer program" and the "second programming" of claim 10 is operative to enable the *receiver station* to complete said "computer program.

Clarification is needed.

8) With respect to claim 13, it is not clear where the disclosure as originally filed described:

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- a. the “**second programming**” of line 2 that is includes within the “transmitter control signal” of line 1.

Clarification is needed.

9) With respect to claim 14, it is not clear where the disclosure as originally filed described:

- a. the “signal” of line 3 which includes the “first programing”;
- b. the “signal generator” of lines 1, which is operatively connected to a “transmitter”, and to which is communicated said “signal” of line 3;
- c. the “balance of the program” of line 5 that is incorporated into the “signal” that is communicated to the transmitter.

Clarification is needed.

10) With respect to claim 15, it is not clear where the disclosure as originally filed described:

- a. the “computer” of line 1, that is operatively connected to the “signal generator ” of line 2, to which the “second programming” is communicated;

Clarification is needed.

11) With respect to claim 17, it is not clear where the disclosure as originally filed described:

- a. the “**only some of the first programming**”, recited in lines 2 and 3, that “is to be outputted” to a subscriber by the implied step of outputting.
- b. the implied step of processing in which all of the first programming “is to be processed” at the receiver station.

Clarification is needed.

12) With respect to claim 18, it is not clear where the disclosure as originally filed described:

- a. the “second programming” of line 2 that is operative at the receiver station to perform processing of the first programming;
- b. the step of storing the “second programming” as is recited in lines 1 and 2, wherein the stored second programming is operative at the receiver station to perform processing of the first programming;
- c. the “second programming” of line 2 that is operative at the receiver station to perform outputting of “only some of the first programming”.

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- d. the step of storing the “second programming” as is recited in lines 1 and 2, wherein the stored second programming is operative at the receiver station to perform outputting of “only some of the first programming”.

Clarification is needed.

13) With respect to claim 20, it is not clear where the disclosure as originally filed described:

- a. the “incomplete programming element” of line 2;
- b. the “class of data” that is recited in line 3;
- c. the “second programming” of line 2 that operates to perform the implied step of “completing” by operating to complete the incomplete programming element by processing the “class of data”.
- d. the “control signal” of line 4 which designates “said incomplete programming element” that is included within the first programming;
- e. the “control signal” of line 4 which designates “said class of data” that is processed by second programming.

Clarification is needed.

14) With respect to claim 21, it is not clear where the disclosure as originally filed described:

- a. the “programming distributor data” of line 2;
- b. the steps of “receiving and storing” the “programming distributor data” of line 3;
- c. the “class of data” that is recited in line 1 which designates the “programming distributor data” that is received and stored.

Clarification is needed.

15) With respect to claim 22, it is not clear where the disclosure as originally filed described:

- a. the “subscriber data” of line 2;
- b. the steps of “receiving and storing” the “subscriber data” of lines 2 and 3;
- c. the “class of data” that is recited in line 1 which designates the “subscriber data” that is received and stored.

Clarification is needed.

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16) **With respect to claim 30**, it is not clear where the disclosure as originally filed described:

- a. the “one or more peripheral devices” of line 3;
- b. the “control program” of line 2;
- c. the “first storage station” of line 2;
- d. the steps of “receiving and storing” the “control program” that is recited in line 4;
- e. the “controller” of line 1 that is caused to control more than one of the peripheral devices by the received and stored control program.

Clarification is needed.

17) **With respect to claim 31**, it is not clear where the disclosure as originally filed described:

- a. the “matrix switch” that is recited in line 2;
- b. the “digital switch” that is recited in line 2;
- c. the “first storage station” of line 3;
- d. the “**information**” of line 4 that is to be communicated by the “**matrix switch**” of line 2;
- e. the “identifier” of line 4 that is received and stored, wherein said received and stored identifier designates the “information” of line 4 that is to be communicated by the “**matrix switch**”;
- f. the “**information**” of line 4 that is to be communicated by the “**digital switch**” of line 2;
- g. the “identifier” of line 4 that is received and stored, wherein said received and stored identifier designates the “information” of line 4 that is to be communicated by the “**digital switch**”.

Clarification is needed.

18) **With respect to claim 32**, it is not clear where the disclosure as originally filed described:

- a. the “computer” of line 3;
- b. the “memory” of line 2 that is: operatively connected to the “computer” of line 3; and to which is operatively connected the “controller” of claim 30;

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c. the “first tape player” of line 3 that is: operatively connected to the “computer” of line 3; and to which is operatively connected the “controller” of claim 30;

d. the “storage station” of line 1.

Clarification is needed.

19) With respect to claim 33, it is not clear where the disclosure as originally filed described:

a. the “analog television signal” of line 2;

b. the “first programming” of line 1 that is received in the “analog television signal” of line 2;

c. the implied step of receiving the “analog television signal” of line 2 which includes said first programming.

Clarification is needed.

20) With respect to claim 34, it is not clear where the disclosure as originally filed described:

a. the “**digital television signal**” of line 2;

b. the “first programming” of line 1 that is received in the “digital television signal” of line 2;

c. the implied step of receiving the “digital television signal” of line 2 which includes said first programming.

21) With respect to claims 35 and 36, it is not clear where the disclosure as originally filed described:

a. the “intermediate generation set” that is recited in line 2 of claim 36;

b. the “program instruction set” that is recited in line 2 of claim 36;

c. the “second programming” that is stored in claim 35 and that includes at least some of the “**intermediate generation set**” wherein, as recited in claim 20, said stored second programming that includes at least some of the “**intermediate generation set**” operates to complete the incomplete programming element of the first programming by processing a class of data;

d. the “second programming” that is stored in claim 35 and that includes at least some of the “**program instruction set**” wherein, as recited in claim 20, said stored second programming that includes at least some of the “**program instruction set**” operates to

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complete the incomplete programming element of the first programming by processing a class of data.

22) **With respect to claim 37**, it is not clear where the disclosure as originally filed described:

- a. the “storage station” of line 1;
- b. a “storage location” of line 2 that is capable of storing television programming;
- c. a “storage location” of line 2 that is capable of storing radio programming;
- d. a “storage location” of line 2 that is capable of storing **both** television and radio programming as seems to be implied by the “each capable of storing at least one” recitation;
- e. the “transfer device” of line 3 that is capable of communicating television and radio programming **“to”** said storage locations;
- f. the “transfer device” of line 3 that is capable of communicating television and radio programming **“from”** said storage locations;
- g. the “processor” of line 5 for controlling the plurality of storage locations;
- h. the “processor” of line 5 for controlling the transfer device that is capable of communicating television and radio programming “to” said storage locations;
- i. the “processor” of line 5 for controlling the transfer device that is capable of communicating television and radio programming “from” said storage locations;
- j. the “controller” of line 5 for controlling the plurality of storage locations;
- k. the “controller” of line 5 for controlling the transfer device that is capable of communicating television and radio programming “to” said storage locations;
- l. the “controller” of line 5 for controlling the transfer device that is capable of communicating television and radio programming “from” said storage locations;
- m. the “computer” of line 5 for controlling the plurality of storage locations;
- n. the “computer” of line 5 for controlling the transfer device that is capable of communicating television and radio programming “to” said storage locations;
- o. the “computer” of line 5 for controlling the transfer device that is capable of communicating television and radio programming “from” said storage locations;
- p. the step of “selecting” the **one** of said plurality of storage locations that is recited in line 10.

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q. the step of “selecting” **more that said one** of said plurality of storage locations as is recited in line 10 as seems to be implied by the “at least one” recitation

r. the “intermediate generation set” that is recited in line 17;

s. the step of storing the “intermediate generation set” that is recited in line 17 wherein the storing step occurs “**in respect of**” the radio/television programming that is received and stored at said storage location(s);

t. the “intermediate transmission station apparatus” of line 19 which generates “program instruction set information” as a result of “computer program information”, e.g. the intermediate generation set”, that is stored in respect of received television programming;

u. the “intermediate transmission station apparatus” of line 19 which generates “program instruction set information” as a result of “computer program information”, e.g. the intermediate generation set”, that is stored in respect of received radio programming.

Clarification is needed.

23) With respect to claim 38, it is not clear where the disclosure as originally filed described:

a. the “computer” of line 1 that is operatively connected to the “storage station” of line 2;

b. the “intermediate generation set” of line 3 that is communicated to said “computer” of line 3;

c. the step of modifying said received/stored signal, which received/stored signal includes **television** programming, in accordance with the “intermediate generation set” of line 3 that is communicated to said “computer”;;

d. the step of modifying said received/stored signal, which received/stored signal includes **radio** programming, in accordance with the “intermediate generation set” of line 3 that is communicated to said “computer.”

Clarification is needed.

24) Claims 39, 40, 42, 45, and 46 contain problems similar to those exemplified above. Appropriate clarification is therefor needed.

25) With respect to claim 51, it is not clear where the disclosure as originally filed described:

a. the “storage station” of line 1;

b. the “at least one storage location” of said storage station as is recited in line 2;

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- c. the “audio” of line 3 that is received from a “remote transmitter station”;
- d. the “receiver” of line 3;
- e. the “programming” of line 4 that is communicated by the “transfer device” of line 3 “to” at least one storage location;
- f. the “programming” of line 4 that is communicated by the “transfer device” of line 3 “from” at least one storage location;
- g. the “processor” of line 5 that is capable of controlling the “storage location”;
- h. the “processor” of line 5 that is capable of controlling the “transfer device”;
- i. the “at least one signal” of line 7 which includes the programming that is communicated to/from said storage location;
- j. the “duration of time” that is recited in line 6 during which “a first portion” of the programming, e.g. that which is communicated to/from the storage location, is outputted;
- k. the “time interval” that occurs within said “duration of time” that has the recited “specific relevance” (note line 9);
- l. the “second portion” of “programming” recited in line 9 that includes “audio”;
- m. the “at least said second portion *of said at least one signal*” that is recited in lines 10 and 11 that is communicated from said “remote transmitter station”;
- n. the received “at least one signal” of line 12 that is communicated to the “one storage location” of lines 12 and 13;
- n. the received “at least one signal” of line 12 that is communicated to *more than said “one storage location”* of lines 12 and 13 as is implied by the “at least one” recitation;
- o. the recited step of “storing” of lines 14 and 15 in which said first and second portions of programming are stored at the “one storage location” to which the received “at least one signal” was also communicated;
- p. the recited step of “storing” of lines 14 and 15 in which said first and second portions of programming are stored at the *more than said “one storage location”* to which the received “at least one signal” was also communicated;
- q. the recited “**computer code**” of line 16 which is operative at an “ultimate receiver station” to output “said audio” during the time of specific relevance;

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r. the recited step of “storing” of line 16 in which said “**computer code**” is stored at said “storage station”;

s. the recited “**data**” of line 16 which is operative at an “ultimate receiver station” to output “said audio” during the time of specific relevance;

t. the recited step of “storing” of line 16 in which said “**data**” is stored at said “storage station”;

Clarification is needed.

26) With respect to claim 52, it is not clear where the disclosure as originally filed described:

a. the “**programming**” of line 4 that is modified in accordance with the “**computer code**” that has been communicated to a “computer”;

b. the “**programming**” of line 4 that is modified in accordance with the “**data**” that has been communicated to a “computer”;

c. the “**at least one signal**” of line 4 that is modified in accordance with the “**computer code**” that has been communicated to a “computer”

d. the “**at least one signal**” of line 4 that is modified in accordance with the “**data**” that has been communicated to a “computer”.

Clarification is needed.

27) With respect to claim 53, it is not clear where the disclosure as originally filed described:

a. the “said signal” of line 1 which includes “said programming and which is modified by having “information” embedded within itself.

Clarification is needed.

28) With respect to claim 54, it is not clear where the disclosure as originally filed described:

a. the “programming” of line 1 which is modified by combining audio into itself.

Clarification is needed.

29) With respect to claim 55, it is not clear where the disclosure as originally filed described:

a. the “storage station” of line 1;

b. the “at least one storage location” of said storage station as is recited in line 2;

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- c. the “audio” of line 3 that is received by the receiver of line 3;
- d. the “receiver” of line 3;
- e. the “programming” of line 4 that is communicated by the “transfer device” of line 3 “to” at least one storage location;
- f. the “programming” of line 4 that is communicated by the “transfer device” of line 3 “from” at least one storage location;
- g. the “processor” of line 5 that is capable of controlling the “storage location”;
- h. the “processor” of line 5 that is capable of controlling the “transfer device”;
- I. the “at least one signal” of line 7 which includes the programming that is communicated to/from said storage location;
- j. the “time interval of specific relevance” of line 9 before which a first part of audio was to be outputted at an ultimate receiver station; wherein said “audio” is included within a “first portion” of the “programming” that is communicated to and/or said storage location and/or locations;
- k. the “audio” of line 8;
- l. the “first part” of said audio that is also recited in line 8;
- m. the “second part” of said audio that is recited in lines 9 and 10;
- n. the “video” that is recited in line 11 that is included within *at least* a “second portion” of the “one signal” itself or of “at least” said one signal (i.e. which, apparently, may be interpreted as being the one signal itself????);
- o. the recite step of lines 15 and 16 in which “first” and “second” portions of said programming are stored at one storage location and, alternatively, at mote that said one storage location;
- p. the recited step of “storing” one processor instruction, and alternatively more than said one processor instruction, at said storage station wherein the stored instruction/instructions are use to modify the “one signal”, and alternatively more than said one signal, prior to the ones signal or the signals transmission to the ultimate receiver station.

Clarification is needed.

30) Claims 56-64, 68, 72-74, 82-89, and 93 require similar clarification to that which has been exemplified above.

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B) Claim 34, which is directed to the processing/distribution of digital television signals, is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

A). PREFACE:

- 1) For the purpose of this rejection, the examiner has assumed that applicant is actually claiming “digital television” which he recites “digital television”; and**
- 2) As per an earlier agreement, copies of the “prior art” cited in section “B)” of this paragraph have not been provided with this Office action since such copies were previously provided in co-pending application S.N. 08/449,097.**

B) THE ORIGINAL “DIGITAL TELEVISION” REJECTION:

A) Applicant has now presented claims which appear to be directed to the distribution of “digital television signals”. Applicant alleges that the distribution of such “digital television signals” was described by applicants original disclosure. With respect to this allegation, the following is noted:

L As originally drafted, it seems apparent that applicant uses the terminology “digital television signals” to refer to conventional television signals, e.g. representing conventional television programming, which comprised digitized audio and digitized video signal components [SEE “Example #7” which begins of page 288 of applicant’s current disclosure]. However, as originally filed, applicant’s disclosure clearly lacked any specific description: a) as to how the “digital television signals” of applicant’s alleged invention(s) were to have been formatted for transmission over their disclosed television distribution system *using the method(s) that are now recited in the pending claims*; and b) as to how the transmission circuitry of applicant’s alleged invention(s) was modified and/or configured for the purpose of handling these digital television signals *in the manner that is now recited in the pending claims*. Apparent justification for the lack of such teachings in applicant’s originally filed disclosure seems to be based: 1) on the allegation put forth by the original disclosure that “digital television signals”, of the type described/claimed, were well known in the art at the time of applicant’s alleged invention [note lines 30-33 on page 288 of applicant’s disclosure]; and 2) on the apparent assumption that the “digital television signals” of applicant’s disclosure could be handled/transmitted in a manner that was interchangeable with the

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handling and transmission of conventional analog television signals.³⁶ The examiner maintains that, at the time of applicant's alleged invention, such allegations and assumptions were in error.

Here, the examiner emphasizes that he does not dispute the fact that broadcasting digitally formatted television signals was in fact well known to those skilled in the art at the time of applicant's alleged invention. Specifically, the examiner acknowledges that the transmission of digital television signals was in fact known when, under "rare" circumstances, a transmission channel of sufficient bandwidth for such digital television signals was available. However, it is noted that the transmission of conventional digital television signals was not interchangeable with the transmission of analog television signal as assumed by applicant's original disclosure because of the extremely large bandwidth that was required to transmit conventional digital television signals; i.e. this was true even when the digital television signals had been compressed using state of the art bandwidth compression techniques [1][2][3].

Given the above, the examiner maintains that the description found in applicant's original disclosure pertaining to the transmission of "digital television signals" using applicant's alleged invention(s) was insufficient to have enabled the pending claims. Specifically, it is maintained that applicant's original disclosure at least failed to disclose and describe the manner in which the recited "digital television signals" had to have been compressed, formatted, and/or processed so as to have enabled them to have been distributed the manner that was originally described; e.g. the manner that now seems to be claimed.

Because of the above, applicant has been requested to submit evidence (e.g. a US Patent or a printed publication) to show support the allegations and assumptions on which applicant's original disclosure was clearly based; i.e. references which show the means needed to format and transmit "digital television signals" in a manner required by

³⁶ For example, the disclosure described portions of applicant's alleged invention(s) as having operated to transmit digital television signals over a TV channel during a first period of time and as having transmitted analog television signals over said same channel during a subsequent period of time [see lines 1-5 on page 302 of applicant's disclosure]. No discussion as to any difference in the handling of the two different television signals by the alleged invention(s) was ever provided, suggested, or recognized via applicant's original disclosure.

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applicant's disclosed/claimed invention(s) were in fact well known to those skilled in the art at the time of applicant's alleged invention.

II. The examiner also points out that even those sections of applicant's original disclosure which seems to be directed to the transmission of "digital television signals", e.g. "Example #7" which begins on page 288 of applicant's disclosure, provide few clues as to how the recited "digital television signals" were to have been compressed, formatted, handled, and transmitted by applicant's alleged invention(s) in order to have allowed them to be processed in the manner that is now set forth in the pending claims. For example, the description of applicant's alleged invention(s) failed to explain: 1) how the "digital television signals" of applicant's alleged invention(s) were formatted and/or compressed so as to have allowed them to have been handled, transmitted, and/or processed in the manner that is now recited in the pending claims; 2) how the "digital television signals" of applicant's alleged invention(s) were formatted and/or compressed so that they could be transmitted over the same TV channel that was used to carry conventional analog TV broadcasts as originally disclosed [see lines 1-5 on page 302 of applicant's disclosure]; 3) how the subscriber stations of applicant's alleged invention were modified in order to have handled/processed "digital television signals" in the manner that is now claimed; 4) how the "SPAM" messages of subscriber stations were to have been embedded in the "digital television signals", how said "SPAM" messages were to have been carried by said digitally formatted television signals, and how said "SPAM" messages were to have been extracted from digitally formatted televisions signals; 5) how the bit-rate of the "SPAM" messages that were carried by said digital television signals was related to the bit-rate of the digital television signals into which they were embedded and how this bit rate related to the bit-rate of the "SPAM" signals that were carried in the analog television signals and how the disclosed/claimed system was configured to handle any such differences [e.g. while not addressed in applicant's original disclosure, it appears that the differences between the bandwidth of digital television signals and analog television signals would require corresponding changes in the bit-rate of the "SPAM" messages that were embedded in respective ones of the two types of television signals].

III. For the reasons set forth in parts "I" and "II" of this paragraph, the examiner maintains that the pending claims which are directed to the

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handling/transmission of "digital television signals" were not enabled by applicant's original disclosure because the allegations and assumptions on which the disclosed handling/transmission of such digital television signals was based appear to have been erroneous. The examiner maintains that these pending claims represent an *invitation to experimentation* when read in the context of the state of the "digital television signal" transmission art which actually existed at the time of applicant's alleged invention; i.e. the technology required to have handled/transmitted "digital television signals" in the manner that was disclosed, and thus in the manner that is apparently claimed, does not appear to have existed at the time of applicant's alleged invention.

THE PRIOR ART SUPPORT FOR THE REJECTION:

[1] The publication "Digital Television Transmission With 34 Mbit/s" by Burkhardt et al. evidences a conventional transmission system in which a Television signal was broadcasted in a digital format [see figure 2]. Even though the bandwidth of the digital television signal was compressed prior to transmission, said digital signal still required a 22MHz transmission channel [see the second paragraph under the heading "Bit-Rate Reduction" on page 244]; i.e. wherein a bandwidth of 22MHz is almost 4X that of a standard 6 MHz TV channel used for analog television signal transmission.

[2] The US Patent No. 3,755,624 to Sekimoto evidences a conventional system in which a television signal was digitally formatted and bandwidth compressed prior to broadcast. The resulting bit-rate of this compressed digital television signal was 32 Mbit/s which required a bandwidth more than 3X that of said standard 6MHz Tv channel.

[3] The US Patent No. 4,742,543 to Fredericksen illustrates a system in which a television signal was processed on the transmitter side of a broadcast system in a digital data format [see figure 1]. However, prior to broadcast, Fredericksen converted the digital television signal back into an analog signal format (@33). Such D/A conversion was described as having been necessary because the standard analog TV channel that was used to transmit the television signal was not of sufficient bandwidth to carry the signal in its digital format (note lines 18-23 of column 5). This provides further evidence that conventional "digital television signals" could not be handled in the manner described by applicant of his alleged invention(s).

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C) ADDRESSING APPLICANT'S ARGUMENTS AND SUBMISSIONS:

1) The examiner notes that term "digital television" only appears once within the entire 557 pages of applicant's originally filed disclosure and that occurs in line 16 on page 458. However, even here, the specific context in which it is being used is far from clear; i.e. does it refer to the transmission of digital TV programming?, does it refer to the transmission of digital still picture frames in a digital video format?, or does it refer to something else?.....*WHO KNOWS?* In any event, the examiner does not believe that this lone occurrence the "digital television" terminology in the entire 557 pages of applicant's instant specification, i.e. which appears within the phrase "digital television transmission" and not "digital television signal", provides the required antecedent basis or the required section 112-1 support for the use of the "digital television signal" terminology within in the context of all of the presently pending amended claims into which it has now been added/introduced. On its face, the examiner finds it difficult to accept applicant's allegation that his disclosure could have adequately disclosed or described the numerous methods and structures for distributing and processing "digital television signal" which are now allegedly being claimed, when the term "digital television signal" itself does not appear anywhere within the 557 pages of his originally filed disclosure ³⁷.

2) While the term "digital television signals" does not occur anywhere within applicant's originally filed disclosure, applicant's originally filed disclosure did set forth "Example #7", whose description begins on page 288 of applicant's original written description, which allegedly operated to transmit "*well known*" digital video and digital audio signals; i.e. a "digitized television signal" (?). While much of the "Example #7" description remains unclear to the examiner, what seems quite clear is that "Example #7" sets forth an embodiment in which:

- a) an television origination station was configured so as to selectively output analog television signals and digitized television signals; and
- b) a television distribution network was configured to distribute the originated analog television signals and originated digitized television

³⁷ In the past, applicant has alleged that his right to be his own lexicographer gives him the right to introduce the "digital television signal" terminology into his pending amended claims. The examiner maintains that this is only true if/when applicant or the record clearly explicitly defines the newly introduced terminology in a manner which is consistent with the scope of the originally filed disclosure and is consistent with the normal/accepted meaning of the introduced terminology. The examiner maintains that applicant continues to fail to meet such a burden on both accounts; i.e. applicant refused to explicitly define the meaning of this introduced "digital television signal" terminology and one can only guess as to its intended scope/meaning based on applicant's originally filed disclosure.

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signals over the same “pipes” during respective times of the day [i.e. SEE lines 1-5 on page 302].

The examiner maintains that this description was not enabling at the time of applicant’s alleged invention because it seems to be based on a basic misunderstanding as to the very diverse nature of analog and digital television transmissions (i.e. on the erroneous assumption that analog and digital television transmissions are simply interchangeable); and/or on the erroneous assumption that bandwidth compression technology existed in 1987 which would have allowed such analog and digital transmission interchange ability [note “THE ORIGINAL” rejection that is set forth in part “B” of this paragraph]. Trying to have made and used the system which was founded in such misunderstanding or based on such erroneous assumptions (i.e. that which is now allegedly being claimed) would have been impossible. The examiner notes the following:

a) At the time of applicant’s alleged invention, those of ordinary skill in the art had long recognized the many benefits that could be obtained by processing and transmitting “digital television signals” in place of “analog television signals”. However, those of ordinary skill in the art understood that there was a “big catch” attached to digitized television signal transmission which prevented its use. Namely, the “pipes”/circuitry needed to distribute and process the “digital television signals” of the day had to be of an unacceptably large bandwidth; i.e. many times greater than those used to distribute and process their analog counterparts³⁸. One simply could not transmit and process digital television signals using the same “pipes”/circuitry which carried/processed analog television signals as erroneously alleged/described/assumed within the “Example #7” embodiment of applicant’s originally filed disclosure [i.e. again, note lines 1-5 on page 302]. Simply put, applicant’s originally filed disclosure contributed absolutely nothing to the digital TV broadcast art which would have enabled one of ordinary skill in the art to have overcome the well known bandwidth “catch” inherent to digital television signal transmission. Instead, it appears that applicant’s original disclosure chose to ignore the bandwidth problem (or failed to recognize that it even existed). Unfortunately, this bandwidth “catch” could not be ignored by those of ordinary skill in the art when trying to implement that which applicant described and now (apparently) claims. Being such, applicant’s example #7

³⁸ SEE: the article “A Primer on Digital Television” by Howell on pages 538-541 of the July 1975 issue of the *Journal of the SMPTE* (volume 84); the article “Goodbye, TV Snow” by Ferre on pages 14-22 of the May 1977 issue of *Electronic Servicing*; and the article “The Impact of Digital Techniques on Studio Equipment” by F.G. Parker (i.e. cited by applicant).

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description was not enabling of that which it described (i.e. that which is now allegedly claimed);

b) What has now made the broadcast/distribution of “digital television signals” possible in today’s world, i.e. in the year 2001, has been the discovery, *by others*, of high compression ratio algorithms which now allow broadcast quality television signals to be carried/distributed via “pipes” of conventional/available bandwidth. Applicant’s original 1987 disclosure contributed nothing to these enabling advancements in the compression technology nor could it possibly be based on such advancements in view that they did not exist as of applicant’s original 1987 filing date. Thus, it seems that applicant’s allusions to the distribution/processing of digital video/audio signals in “Example #7” represented, at best, an understanding or recognition on the part of applicant that digital television signal transmission systems would probably be realized some time in the coming future and, at such a time, that that which applicant described as “Example #7” might then be applied/extended thereto³⁹; and

c) Applicant’s original 1987 disclosure, clearly alleged that the “[digital] television signal” of applicant’s “Example #7” embodiment, i.e. one consisting of so-called “digital video” and “digital audio”, was *well known in the art* at the time of applicant alleged invention [see lines 30-33 on page 288 of applicant’s written description]. In the past, after his review of the 2000+ references submitted by applicant failed to find such a showing, the examiner *required* applicant to submit a reference to support the allegation made in applicant’s disclosure; i.e. that such described [digital] television signals were in fact “well known” [again, note “THE ORIGINAL” rejection of part “B” above]. In response to this requirement, applicant submitted US Patent #3,906,480 to Schwartz et al. However, Schwartz et al. seems to be totally unrelated to the alleged “[digital] television signals” of applicant’s “Example #7” embodiment. For example, the digital video signals described in the Schwartz et al. patent represented non-real non-real-time computer generated, vector encoded, symbolic and alphanumeric images. Such a transmission scheme could not have been used to carry/transmit the digital video component of conventional

³⁹ The examiner is not acknowledging that he understands applicant’s example #7 description in terms of how it supports the pending claims [i.e. an issue which will be addressed under the adequate written description requirement of section 112-1].

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television signals/programming of the type that is set forth by applicant's "Example #7". For applicant to suggest that teaching of Schwartz et al. be used as scheme for producing the "digital video" of his "Example #7", given its completely non-analogous nature, would be an invitation to experimentation even by today's standards!

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SECTION V: (103 REJECTIONS)

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1) Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over delayed TV programming transmission systems, e.g. as exemplified in the publication "Vertical Interval Signal Applications" by Etkin, in view of conventional automated TV program recording systems as exemplified Vikene [WO 80/02093].

A) The examiner takes *Official Notice* that it was notoriously well known in the TV/Radio art for intermediate TV/Radio transmission stations to have included storage/recording devices for automatically recording TV/Radio programming being broadcast from a remote central transmitter station.⁴⁰ Such storage/recording systems allowed the intermediate transmitter stations to time shift the TV/Radio programming being broadcast by the central transmitter station to a desired re-broadcast.

Under the heading "**8. Unattended VTR's remote controlled**" on page 10 of the publication, Etkin described a system in which microwave broadcast system was used to broadcast selected TV programming to CATV headends during

⁴⁰ NOTE: Haselwood et al. [US #4,025,851] (e.g. lines 28-33 of column 3); Hetrich [Australian #74,619/74] (e.g. the last 4 lines on page 10); etc, ...

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otherwise “dark” transmission periods; e.g. during periods outside normal broadcast hours. The selected TV programming being broadcast was automatically stored/recorded by storage/recording devices located at the headends under control of auxiliary data that had been embedded, e.g. at the central transmitter station location, in the VBI of the broadcasted TV programming. The so stored/recorded TV programming was then played back by the headends at some later desired time thereby time shifting the selected programming. Etkin noted that such an automated recording systems “solved two of the most vexing problems” that existed in the cable distribution industry:

1. *dubbing* (the process of copying selected TV programming from a master tape to one or more second generation tapes); and
2. *bicycling* (the process of physically transporting the dubbed second generation tapes to and from the headend transmitter locations).

To the contrary, the automated recording system described by Etkin allowed selected TV programming to be automatically transferred to the CATV headends via a process that did not require “dubbing and bicycling”.

B) Etkin failed to explain exactly how the auxiliary data that was embedded in the VBI of the selected programming was actually used by his described system to control/automate the recording of the selected programming at the headend locations. Obviously, the reason that such details were missing from the Etkin’s publication was the fact such automated recording systems, e.g. ones which operated under control of VBI data, were also notoriously well known in the art. Specifically, because such details were well known to those of ordinary skill in the art, it was unnecessary for Etkin to have provided such details within his own article. The following is noted:

1. Vikene [WO 80/02093] has been cited as being illustrative of such conventional automated storage/recording art. In Vikene:
 - a. Auxiliary data representing program identification labels are inserted into the VBI of TV programming that is to be broadcast by the transmitter station;
 - b. On the receiver side of the system, one or more program identification labels which identify the TV programming which is to

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be recorded on the receiver side of the system are obtained from some type of program listing and are entered into the recording/storage device on the receiving side of the system.

c. The program identification labels entered by the user are then compared with the labels that exists in the VBI of the broadcasted TV programming and, when a match is detected, the programming being broadcast is recorded along with the program identification label. The recorded program identification label allows the storage location of respective TV programming to be found/located during reproduction thereby automating the program "search" process at the time of reproduction/playback; i.e. a "search" problem that occurs when more than one desired/selected TV program has been recorded on a given tape.

The examiner maintains that it would have at least been obvious, if not inherent, Etkin to have provided automated control over the Etkin's system in the manner described/illustrated in more detail via Vikene; i.e. for the auxiliary data described by Etkin to have represented program identification labels of the type described in Vikene.

C) With respect to the limitations of pending amended claim 3, the following positions are taken:

1. That the program identification data which must be entered and "stored" on the receiver side the Etkin's system corresponds to the "programming" requirement signal" that is recited in line 5 of claim 3;
2. That the recording device at the receiver station described in Etkin inherently "locates" available storage space on the tape for the recording/storage of the desired TV programming, and that the process of locating said space is based at least in part the entered/stored requirement data; and
3. That the programming in Etkin that is recorded is in fact stored in "located" available space.

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2) Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over delayed TV programming transmission systems, e.g. as exemplified in the publication "Vertical Interval Signal Applications" by Etkin, in view of conventional automated TV program recording systems as exemplified Vikene [WO 80/02093], further in view of Corey [US Patent #4,199,791] and the publication "The Vertical Interval: A General-Purpose Transmission Path" by Anderson.

A) In the rejection that was set forth above in part "1)" of this section, little patentable weight was given to the recited step of "locating an available programming storage space..." because any system which records TV programming must, e.g. in some inherent way, determine/locate available storage space on which to record the programming if/when the programming is to be recorded. The limitation in question fails to define what an "available storage space" is, and fails to define how such an "available storage space" is "located." Thus, in said part "1)" of this section, the examiner has taken the position that claim 3, in its broadest sense, is met by the "prior art" of record for the reasons stated above. However, for the sake of completeness, the present rejection attempts to address the limitations of claim 3 in the more narrow sense of the written description itself, e.g. at least to the extent that the written description is presently understood by the examiner.

B) Within TV/Radio transmission art, "CART" machines were often used in TV and Radio transmission stations so as to automatically playback sequences of pre-recorded tape cartridges in accordance with the stations locally stored programming TV/radio program broadcast/"event" schedule.⁴¹ For this reason alone, it would have been obvious and desirable for automated recording systems of the type described by Etkin to have recorded the selected programming on tape cartridges in a manner that was compatible with the conventional "CART" machine technology used by the TV and Radio broadcast stations. Specifically, it would have been obvious and desirable to have individually recorded each of the TV programs on its own "CART" compatible tape cartridge. To this point, Corey has been cited as evidencing that it was in fact well known (e.g. at least in the analogous Radio/audio broadcast art) to have implemented automated program recording systems using pluralities of processor controlled recording devices each of which is capable of individually recording audio programming on its own "CART" compatible tape cartridge [e.g. note lines 3-27 in column 5]. Anderson

⁴¹ NOTE: "The Automation of small Television Stations" by Young et al.; "Automatic Storage and Retrieval of Videotaped Programs" by Kazama et al.; etc, ...

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has been cited simply to show that it was known to have used pluralities of separate video recording devices at receiver stations in order to individually record TV programming too (e.g. @ location 1 and 2 of figure 8).

C) Because the TV programming that was being stored/recorded by the storage/recording devices in Etkin's system were being recorded/stored for the expressed purpose of re-broadcast by the intermediate transmission stations, it would have been obvious to one of ordinary skill in the art to have individually recorded the programs on individual cartridges so as to be ready for the re-broadcast process. Being such, it would have been obvious for the automated recording apparatus in Etkin's system to have comprised a plurality of recording/storage devices for individually recording each one of the programs on its own tape cartridge. Such an implementation could obviously be achieved using a plurality of processor controlled recording devices (e.g. as in the case of Corey) or by simply adding additional Vikene-type programmable VTRs in a parallel configuration (e.g. as in the case of Anderson). In either application, the process of selecting the recording device that is to record a given program inherently corresponds to the recited process of "locating an available programming storage space..." as read in the context of applicant written disclosure; e.g. to the extent that the written description is understood by the examiner.

3) Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over delayed TV programming transmission systems, e.g. as exemplified in the publication "Vertical Interval Signal Applications" by Etkin, in view of conventional automated TV program recording systems as exemplified Vikene [WO 80/02093], further in view of Corey [US Patent #4,199,791] and the publication "The Vertical Interval: A General-Purpose Transmission Path" by Anderson for the same reasons that were discussed for claim 3 above. The following is noted:

1) The recited "instruct signal" that is recited in line 6 of claim 8 corresponds to the auxiliary VBI data of the applied prior art that identified the programming; e.g. the "labels" or "addresses" of the prior art that were embedded in and broadcasted with the TV programming in order to automate the recording process at the receiving intermediate transmitter stations of the system;

2) As noted previously, the recited "programming requirement signal" of lines 7 and 8 corresponds to the "labels" or "addresses" which must be stored at the receiving intermediate transmitter stations station of the prior art in order to be compared with those which are embedded in the VBI of the programming so as to

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determine which recording device records which of the broadcasted programming on its available cartridge-type recording/storage space; and

3) The recited "transmitter control signal" of line 15 corresponds to the program broadcast/event schedules of the prior art which are stored at the intermediate station in order to determined the sequence in which the pre-recorded tape are then played back.

4) Claim 37 and 82 are rejected under 35 U.S.C. 103(a) as being unpatentable over delayed TV programming transmission systems, e.g. as exemplified in the publication "Vertical Interval Signal Applications" by Etkin, in view of conventional automated TV program recording systems as exemplified Vikene [WO 80/02093], further in view of Corey [US Patent #4,199,791] and the publication "The Vertical Interval: A General-Purpose Transmission Path" by Anderson for the same reasons that were discussed for claim 8 above. The following is noted:

1) With respect to claims 37 and 82, it is noted that the recited "intermediate generation set" of line 17 now corresponds to the program broadcast/event schedules of the prior art which are stored at the intermediate station in order to determined the sequence in which the pre-recorded tape are then played back.

4) Claims 51 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over delayed TV programming transmission systems, e.g. as exemplified in the publication "Vertical Interval Signal Applications" by Etkin, in view of conventional automated TV program recording systems as exemplified Vikene [WO 80/02093], further in view of Corey [US Patent #4,199,791] and the publication "The Vertical Interval: A General-Purpose Transmission Path" by Anderson for the same reasons that were discussed for claims 37 and 82 above. The following is noted:

1) First it is noted that the recitations of claim 51 seem only to further define the type of TV signal that is stored and re-broadcast by the intermediate station of the prior art. In this regard, the examiner maintains that there were many known forms of TV programming which included embedded codes which determined how the audio portion of the programming was to be presented. For example, it was known to have embedded codes in TV programming which allowed the TV receivers (e.g. the recited "ultimate" station locations) to determine whether stereo

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or SAP audio was available in the signal transmission and, when they were, for causing the stereo or SAP audio to be outputted from the audio output device of the receiver (i.e. from the speaker); e.g. wherein the recited "time interval of specific relevance" corresponds to the time in which programming having stereo or SAP signaling is being recorded and re-broadcast by the system.

2) The examiner maintains that it would have been obvious for the TV programming being handled by the applied "prior art" to have been of such a conventional type; e.g. of the type which includes SAP or stereo identifiers.

5) Claims 4-7, 9-15, 17, 18, 20, 21, 30-36, 38-40, 42, 45, 46, 52-54, 56-64, 68, 72-74, 83-89, and 93 are rejected under 35 U.S.C. 103(a) as being unpatentable over delayed TV programming transmission systems, e.g. as exemplified in the publication "Vertical Interval Signal Applications" by Etkin, in view of conventional automated TV program recording systems as exemplified Vikene [WO 80/02093], further in view of Corey [US Patent #4,199,791] and the publication "The Vertical Interval: A General-Purpose Transmission Path" by Anderson for the same reasons that were discussed for claims 51 and 55 above.

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SECTION VI: other issues:

>The examiner notes that the art of record has been applied to the claims to the extent of the examiner's understanding in view of the extensive section 112 issues cited above.

> Mangold [DE 2,918,846] has been cited because it illustrates an automated recording system in which the recording device warns the user when insufficient "available storage space" has been detected for the programming that has been scheduled for recording [note lines 4-10 on page 10 of the provided translation].

> Any inquiry concerning this communication should be directed to **David E. Harvey** whose telephone number is **(703) 305-4365**. The examiner can normally be reached Monday-Friday between the hours of 9:30 AM and 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Andrew Faile, can be reached at (703) 305-4380.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231


or faxed to:


(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA. Sixth Floor (Receptionist).

Any inquiry of general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose number is (703) 306-0377.

DEH 8/02


DAVID E. HARVEY
PRIMARY EXAMINER


ANDREW FAILE
SUPERVISORY PATENT EXAMINER
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